# BUSINESS WEEK



Herald Tribune's new Reid: For profits, cover more news (page 110)

A MCGRAW-HILL PUBLICATION

JAN. 7, 1956

50 -

MAIN VEROE WICH CO-



# "Nationals save us 53% annually on our investment."

-CHARLES F. NOYES, CO., INC., New York, N. Y.

"We manage property valued at \$350,000,-000-a job that calls for an unusually fast and flexible system of maintaining records. In addition to being the world's largest real estate management firm, we also operate one of the largest real estate brokerage businesses.

"We are particularly pleased with our National Accounting Machines-not only because they help us maintain peak production efficiency, but also by their remarkable operating economy. They save us \$28,000 a year, an annual return of more than 53% of our investment.

"We depend on Nationals for their great flexibility which permits handling, on the same machines, our monthly operating statements, income and expense reports, check writing, payroll recording and general ledger. Our operators are pleased, too, because with Nationals they get more done with less time and effort.'

Chairman of the Board

how much you can save—and why your operators will be happier. (See yellow pages of your phone book, or write to us at Dayton 9. Ohio.)

THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, ONIO

977 OFFICES IN 94 COUNTRIES

National

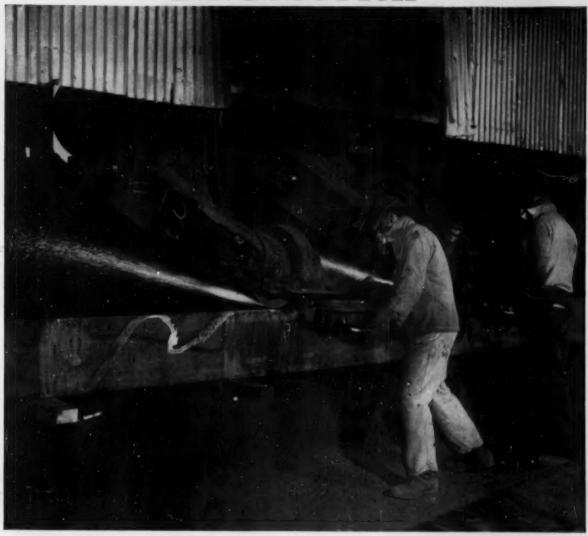
In your business, too, National ma-

chines will pay for themselves with

the money they save, then continue

savings as annual profit. Your near-

by National man will gladly show



# They give steel a hot rubdown

# A typical example of B. F. Goodrich improvement in rubber

THOSE sparks come from grinding wheels that cut through the hard, rough, scaly coating that's on stainless steel when it's first made.

V belts, running at high speed, keep the wheels spinning. But just imagine the jolt to belts when the abrasive wheel bites into steel.

Different kinds of V belts were tried. None lasted more than a few weeks. Some weren't strong enough to take the high speed and jerks. Some weren't flexible enough to take the constant bending over small pulleys.

Then a distributor told the steel company about Grommet belts developed by B. F. Goodrich engineers. The grommets are two extra strong cord loops inside the belts, like twisted cables except that they're endless. High-capacity Grommet belts were put on the grinders. They're so much stronger they last 5 to 6 times longer than previous belts.

Today's B. F. Goodrich V belts are the result of constant improvement, better processes for prestretching cords, for improving cord adhesion, for reducing internal heat and friction. In

these and many other ways B. F. Goodrich belt engineers have successfully attacked the common causes of V belt failure, and in many cases, more than doubled belt service life.

That's why you can be sure of top performance and real money savings when you buy B. F. Goodrich V belts or any rubber product from your B. F. Goodrich distributor. The B. F. Goodrich Company, Dept. M-540, Akron 18, Obio.

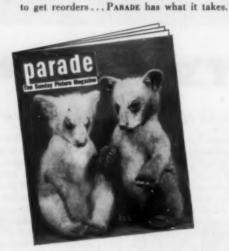
# "STRIKE TH-R-E-E"

Primitive sculpture that looked like a 1956 big league umpire was just one of the "finds" a Parade reporter recently made in New Zealand.

Result: A fascinating story that won a reading from seven in every ten Parade readers. Making people stop, read and remember is something Parade, the Sunday magazine does so well that independent surveys show this is the best read magazine in America, bar none. To advertisers this means twice as many readers for their dollar in Parade

as in the big weekly magazines.

It's a fact: To move merchandise, to make new customers,



<u>Parade</u>...The Sunday magazine section of more than 50 fine newspapers in as many key markets... with more than fifteen million readers every week.

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# Be Our Guest

We're confident that Columbia Carbon Paper Ribbons will produce the best looking executive letters you've ever seen—dignified, impressive, sparkling—on any machine designed for carbon paper ribbons. . .

. Because Columbia's exclusive carbon formulation permits easy transfer of a fullstrength impression to form a sharp, clean, nonblurring image!

Because Columbia's rigid control of the carbon coating process prevents uneven, spotty appearance. Capitals can't overpower lower case characters!

And we'll make it easy for you to judge the superiority of Columbia Carbon Paper Ribbons right in your own office.

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# How To Get Your FREE Ribbon

With your present carbon paper ribbon, type this line on your business letterhead: "Saw your ad in Jan. Business Week." Include your ad in Jain. Business Week. Instance typewriter make and your name. Mail to Columbia Ribbon and Carbon Mfg. Co., 661 Herb Hill Road, Glen Cove, N. Y. \*Note: Carbon ribbons do not fit fabric ribbon-using typewriters.

Polumbia

# New eyes open on a bright wonderful world

- and photography makes identification positive, records vital statistics in life's first few minutes



Camera and film stand ready in the delivery room at San Antonio Hospital, Upland, California.

At San Antonio Community Hospital, Upland, California, a positive means of prompt baby identification brings peace of mind to parents and hospital administrators alike.

In the delivery room, camera and film stand ready. And virtually seconds after the baby is born they capture a record which identifies the mother and establishes the baby's name, sex, date of birth, and weight. So even before mother and baby have become accustomed to being separate individuals, their relationship is permanently and positively preserved on film.

As it is for medical officials, photography is an equal boon to any engineer, scientist or industrialist who must record fleeting instrument readings. It captures action far too fast to see. It analyzes metal structure. It probes for hidden faults. It teaches technics. It makes sales. It is one of the greatest servants business and industry have today. It is helping improve design, speed production, control quality, increase sales and banish office chores.

Whether your business is large or small, photography can work for you too. How? Read some of the ways in the list below.

Eastman Kodak Company, Rochester 4, N. Y.

# ... and here are 16 basic places where Photography can work for you

-5 minutes with this check list can be the soundest business move you've made this year

- Management-Progress photos, Stockholder reports, Record preservation, Information distribution, Control and Organization charts
- Administration—File debulking, Purchase schedule, Office layout, Interior decoration, Form printing
- Public Relations News release, Institutional, Community relations, Public service
- Personnel Identification photos, Job description, Orientation, Payroll records, Employee personal records, House organs, Health records, Bulletins
- ☐ Training and Safety-Safety campaigns, Teaching, Reports, Fire prevention
- Engineering-Drawings, Specification sheets, Drawing protection, Pilot radiography
- Research Reports, Flow studies, Process charts, Library, Photomicrography, electron-micrography, x-ray diffraction, highspeed motion pictures, etc.

- Product Design & Development-Styling, Consumer testing, Motion studies, Stress analysis, Performance studies
- Advertising-Advertisements, Booklets, Displays, Dealer promotion, Television
- ☐ Plant Engineering & Maintenance—Plant layout, Repair proposals, Piping & Wiring installations, Progressive maintenance, Record debulking
- Production-Time study, Work methods, Legible drawings, Schedules, Process records
- ☐ Testing & Quality Control—Test set-ups, Reports, Standards library, Radiography, Instrument recording
- □ Warehousing & Distribution Inventory control, Damage records, Waybill duplicates, Flow layouts, Packing & loading records
- □ Purchasing Schedules, Duplicate engineering prints, Specifications, Component selection, Source information

- Sales-Portfolios, Dealer helps, Sales talks,
  Price & delivery information
- Service Manuals, Parts lists, Installation photos, Training belps, Records

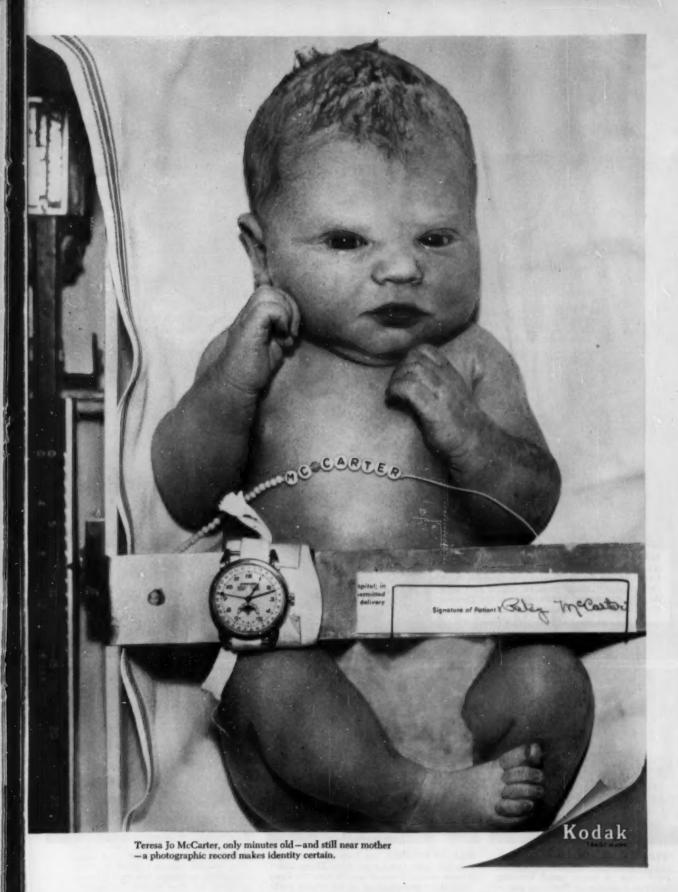


Send for free booklet

These books show how photography is being used today.

Photography in Marketing Photography in Administration Photography in Engineering Photography in Plant Operation

They are free. Write for the ones you want.







SPECIALLY BUILT OVEN at Portland Copper raises temperatures as high as 2400°—one of many metal treating facilities available at Portland plant.



QUALITY CONTROL has been a major factor in building the firm's reputation. Here, Albert Kozick checks X-ray of special weld for flaws—standard procedure on all jet engine work.



DIVERSITY OF OPERATION—now over 40% non-defense—is typified by new, fabricated aluminum toll booth doors ordered for new Maine Turnpike.

# SKILLS LEARNED AS A G-E DEFENSE SUBCONTRACTOR PROVE VALUABLE TO OTHER INDUSTRIES

# Portland Copper's success story underlines interdependence of large and small business

The Portland Copper & Tank Works, Inc., like many small businesses, started with virtually nothing but the personal skills of its owner—in this case a coppersmith who had left Russia in 1909 to seek greater opportunities in the United States. Morris Hugo opened a tiny metal-working plant which existed precariously—with a top gross of only \$12,000—until World War II. Then, with ship repair work for the Navy and the U. S. Maritime Commission in 1943, yearly sales abruptly soared to \$250,000.

Defense skills developed. After the war the company moved to larger quarters in South Portland, Maine, and built up its reputation as a fabricator of stainless steel, aluminum, and special high-temperature alloys. General Electric entered the picture in 1949 with an order for afterburners for J47 jet engines.

Big business helps small business. The Maine firm quickly proved its ability in precision manufacture, made prompt deliveries. And G.E., well-satisfied with the work, soon became Portland Copper's largest customer. As one of more than 17,000 G-E subcontractors and suppliers in the past 5 years, the Portland firm has continued to expand in other non-defense areas: pulp, paper, textiles, chemical and petroleum industries. It now grosses better than \$5,000,000 annually, reports an employee roster of 423—as compared with 100 in 1949.

Contributes to nation's production. This success story dramatizes once more the interdependence of large and small business—and how such a system operates for the benefit of both. General Electric has gained essential services and jet engine components needed to help build up the nation's defense. Portland has acquired new skills and facilities which now make the firm valuable to other manufacturers in our expanding national economy.



INTRICATE FABRICATION is one of more difficult operations Portland performs successfully. Here R. L. Clark checks stainless steel section of a powerful G-E gas turbine.



NEW SKILLS learned as a G-E defense subcontractor are now applied to a variety of jobs for other manufacturers. Typical is this precision welding by Portland Copper and Tank personnel on aluminum panel assembly.

# Progress Is Our Most Important Product

# GENERAL ( ELECTRIC



SUBCONTRACTORS who helped G.E. build the J47-GE-25 during the Korean War got 77 cents of every dollar government paid General Electric for engine.

# Can Small Business Help You?



Thousands of small businesses, like Portland Copper and Tank, have furnished General Electric with practically every kind of skill and service as defense subcontractors and suppliers.

Many of these companies have available production capacity, created in large part by the reduction of defense orders since the Korean War peak. This means that they may be able to apply their skills to

help you with your production.

If you have a manufacturing problem or have work available for subcontracting, please write us on your letterhead stating in as much detail as
possible the type of services or skills you require. We will be glad to suggest
several small businesses who have done similar work for us and may be able

Write to C. W. Bryant, Manufacturing Services Division, General Electric Co., 570 Lexington Ave., New York 22, N. Y.

# USERS REPORT IMPORTANT SAVINGS, IMPROVED DESIGN and BETTER APPEARANCE with TRU-LAY PUSH-PULLS

Here are typical user comments:

Save Space

"These dependable and accurate Remote Controls save space and simplify assembly for Transmission and Hydraulic Valve Controls on Lift Truck."

"Eliminate Failure
"Eliminates all possibility of failure
of remote controls for marine engine
hydraulic transmissions, throttles,

hydraulic transmissions, throttles, governors and synchronizers."

Improve Appearance
"Economical, easy to apply, better

"Economical, easy to apply, better appearance. We use your Push-Pulls for remote control on material flow gates, discharge and weight changing mechanisms on our industrial scales."

Simplify Installation
"Eliminates links, radius rods, and
other lost motion devices for remote
control of four-way operating valves
on the hydraulic motion of our open
hearth chargers."

OUTBOARD FANS — New, simple, troublefree devices for outboard steering — made possible by ACCO Push-Pull — are now available. Look for them at your dealers. Boat Show visitors were enthusiastic about them.

> • Similar advantages are reported by manufacturers of Agricultural Implements, Construction Equipment, Electric Control Panels, Machine Tools and many other products.

> Tools and many other products.
> Tru-Lay Flexible Push-Pulls

snake around obstructions... simplify installation... reduce the number of working parts... to give you this simple and effective assembly.

 The six booklets and bulletins in this DATA FILE will an-

swer further questions you may have about this versatile and dependable tool. Write for a copy.



AUTOMOTIVE and AIRCRAFT DIVISION AMERICAN CHAIN & CABLE

601-A Stephenson Bidg., Detroit 2 2216-A South Garfield Ave., Los Angeles 22 829-A Connecticut Ave., Bridgeport 2, Conn.

## READERS REPORT



### A Continental in Kansas

Dear Sir

Regarding your article Ford's New Continental: Selling Like Hotcakes [BW-Nov.26'55,p28], we were very happy to learn that in some sections of the country the 1956 Continental was being received so well. Our situation has been quite different here in our little town of Topeka, Kans., and also in adjacent Kansas City, Kans. As a matter of information, we have extensively advertised our 1956 Continental for three weeks with quite a liberal discount of up to \$1,000 off list price, but as yet have not received anything that could be considered a serious offer.

As a substantiation of this see [above] our Continental in its customary setting adjacent to one of Topeka's most heavily traveled streets. . . .

G. E. GEOFFROY

JAYHAWK MOTOR CO. TOPEKA, KANS.

# Runaways Not Wanted

Dear Sir:

As one who has been active in the industrialization problems of both New England and Puerto Rico, I read with great interest and appreciation your article on industrial relocation inducements entitled Is It Piracy or Is It Fair Game? [BW—Dec.17'55,p162].

Your readers will be interested to learn how this problem was solved by Puerto Rico, which is listed among the areas offering 10-year tax exemption. This is how it is done:

Regulation—Puerto Rico's tax exemption and other inducements are specifically refused for relocation. Puerto Rico holds official hearings on each application to guarantee against inducements to "any industry to move to Puerto Rico by closing plants or curtailing production" (or employment) in any continental U.S. industrial community.

Promotion—We make no attempt to bury this fact but proclaim it in all our appeals, including fullpage advertisements . . . that begin with a quotation from Gov. Muñoz Marín of Puerto Rico: "We don't want runaway industries. But we do seek new and expanding industries.". . .

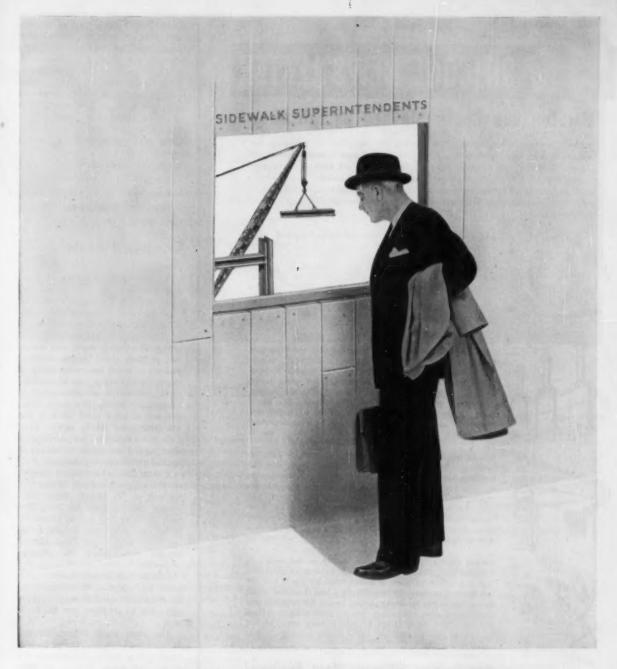
tries.".

Results—By this policy, far from attracting "fly-by-nights" mentioned in your article, Puerto Rico has found itself increasingly able to attract new expansion by some of the most established names in American industry. To mention a few of those added to our constellation in 1955 alone: Beaunit Mills, Botany Brands, Carborundum Co., International Latex, Sunbeam Corp.

Effects—In a land of unemployment, factories established under this program already support, directly or indirectly, more than a quarter million workers and dependents, easing the unemployment pressure which affects both Puerto Rico and some continental U.S. urban centers. Per capita dollar income quadrupled in 12 years, although it is still less than half that of the poorest southern state. Life expectancy jumped from 46 years to 64 years.

Repercussions-We calculate that Puerto Rico's entire industrialization program represents less than 1 of 1% (far under its per capita proportion) of normal continental U. S. industrial expansion, so it has no need for relocating existing U.S. facilities. On the other hand, branch and affiliate operations in Puerto Rico have added to the profits and possibilities of U.S. firms, while Puerto Rico's \$500million-a-year purchases from the mainland have exactly kept pace with its increases in gross product, providing the equivalent of 200,000 mainland jobs to supply them.

Philosophy—The principle behind Puerto Rico's industrialization program is in terms of an economic frontier, based on confidence in American industrial expansion. Of the two-thirds of the world that remains underdeveloped, Puerto Rico is one area that is staying away from "runaway" industry, from economic regimentation and from the dole. The U.S. govern-



# THIS MAN IS GOING TO A FIRE!

He thinks he's going to his office — as usual. But at this minute his office is a roaring mass of flames! Before he arrives it will be completely gutted!

Fire Insurance? Sure — well covered. But that fire's going to put him out of business! You see he never knew that nearly half of all businesses that *lose their records* to fire never reopen their doors! Worse still, he didn't realize how securely (and economically) vital records

can be protected right at their point-of-use in insulated equipment by Remington Rand.

If this had been your fire would your vital records have come through? Some 200 models of Remington Rand certified insulated equipment provide a choice to meet every need in your office. Get full particulars NOW. Ask for SC684 — "Down But Not Out"... Remington Rand, Room 1105, 315 Fourth Avenue, New York 10.

Remington Rand

DOW CORNING CORPORATION

# SILICONE NEWS LETTER

# Maintenance Costs Slashed By Silicones

Today, "materials engineering" is almost as important to maintenance men as it is to design engineers. Dow Corning Silicones in many forms are greatly reducing maintenance costs in factories of all kinds and in end products ranging from electric motors and aircraft to household appliances. Since the yearly industrial maintenance bill is about equal to annual dividend payments, management men will want to review the silicone applications described below



Saves \$17,876 in one year with \$1LASTIC\* insulated wire. Ceramic insulation on lead wires in a chemical company's heat transfer boilers withstood over 400°. If temperatures, but wouldn's prevent oxidation... so wires needed replacing 4 times yearly. Cost of materials, labor and downtime for replacements totaled \$18,400 per year. Wire insulated with Silastic, Dow Corning's silicone rubber, was still in excellent condition after the first year. Net savings estimated at \$17,876.



Annual repainting cest cut 70% with silicene PAINT. Keeping paint on boiler stacks between annual shut down periods posed a costly problem for Cit-Con Oil Refinery. At surface temperatures of 350° to 700° F, organic finishes failed in a few months. A silicone based paint lasted through two annual shutdowns without any sign of failure. Experience indicates that cost of protecting hot metal surfaces for 3 years with silicone paints is comparable to cost of sand blasting and painting with conventional coatings for one year.

No. 17



Silicone GREASE saves \$9,500 a year in replacement parts for conveyor. "Baked" at 420° F for 22 hours every day, the bearings and pulley wheels of an oven conveyor system at Universal Friction Materials Co. needed frequent replacement. Total yearly cost for replacement parts and long production delays was about \$10,000. Then, Universal switched to Dow Corning 41 Grease. Replacement costs dropped to about \$500 a year and downtime was almost eliminated.

No. 12



Silicene INSULATION saves foundry \$6,750 on one motor. In ambient temperatures up to 350° F, driving an induction fan in a core oven stack at Lakey Foundry Corp. is a hot job for any motor. Original 7½ hp Class A motor failed every few weeks involving special cranes for removal and installation after rewinding. Rebuilt with silicone (Class H) insulation, motor lasted 54 times as long; saved \$6,750 in rewind and installation costs alone; permits continuous production.

No. 13

# Dow Corning Silicones Mean Business!

Send coupon for more information on these and other silicone products

Dow Corning Corporation, Dept. 2201, Midland, Michigan Please send me: More information on: 16 11 12 13 13 14 14 15 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	Transcent in
Pépme	DOW COONING
Сотрону	DOW CORNING
Address	CORPORATION
	MIDLAND, MICHIGAN

ATLANTA CHICAGO CLEVELAND DALLAS DETROIT LOS ANGELES NEW YORK WASHINGTON, B.C. CANADA; DUW COSNING SILICONES LTD., LONGON PRANCE: ST. GOBAN, PARIS

ment sends almost 1,200 officials and students each year from other underdeveloped countries to Puerto Rico to study how it is done.

This unique "Operation Bootstrap" program of self-help in the face of dire need, and its great success, can serve as a valuable lesson in development to us all, as well as for the entire world.

REAR ADM. THOMAS F. HALLORAN (USN, RET.)

MAINLAND DIRECTOR FOR
INDUSTRIAL DEVELOPMENT
COMMONWEALTH OF PUERTO RICO
ECONOMIC DEVELOPMENT ADMIN.

### **Canadians Report**

NEW YORK, N. Y.

Dear Sir:

Your humorous article on Canada provided lots of amusement [BW—Dec.3'55,p100]. We used to have in Canada, a very able writer named Stephen Leacock who could produce articles just as funny.

But all humour aside, you should not publish tariff figures without making a more extensive study of the subject. Take a look at machine tools, which I manufactured in Canada for nearly fifty years. What you see in your tariff book is just not telling the whole story. Your Customs Dept. has the privilege of shutting out an article by means of special rules and regulations.

I remember quite well a number of years ago, the Ford Motor Co. wished us to supply them with special cutting tools for their Detroit plant, and we had to refuse the order until we could secure a ruling from your Tariff Dept. stating exactly how much the charges would be.

I have medals awarded our company for machine tools displayed at American exhibitions 75 years ago. Try to get them into the U. S. now.

For many years, Prime Minister Mackenzie King considered he was leading the world in reducing the tariff. You know little of the difficulties with which we have to contend in attempting to trade with your country.

H. G. BERTRAM

DUNDAS, ONT., CANADA

Dear Sir:

Re your report Building a Nation in the Shadow (BW—Dec.3 '55,p100) . . . I am firmly convinced of the need for a much better knowledge of Canada in the U.S. and I am quite sure that your thoughtful and objective report, with its carefully marshalled



# An old-time reminder for today's winter health . . .

Back in grandma's time... before modern heating... the change to long, fleecy underwear was a wise precaution against winter ills. If a cold did start coming on, grandma insisted on another ritual... a hot bath, a daub of ointment on the chest and a quick retreat to a warm feather bed.

Today, as in grandma's time, it is not wise to make too light of a cold. What seems to be only a slight cold may be the beginning of pneumonia and other respiratory ailments. So, even if you don't feel "really sick" with a cold, authorities urge you to do these things:

1. Rest more than usual ... eat lightly ... drink plenty of water and fruit juices. 2. Be sure to check your temperature... and if you have even a degree or so of fever, go to bed. If fever persists, call your doctor.

Fever is important because it may indicate trouble of a more serious nature . . . sinusitis, ear infections, bronchitis and pneumonia . . . to mention a few. When these and other common ailments of the winter season are promptly treated, the chances for rapid recovery are good—thanks largely to the effectiveness of the antibiotic drugs.

Even though medical science can now bring about more

and quicker recoveries from the major winter ailments, it is wise to take every precaution against catching a cold. Here are some measures which may help:

- 1. Guard against drafts and chilling . . . and always wear clothing suited to weather conditions.
- 2. Get enough sleep and cat well-balanced meals to help keep resistance built up during the cold months.
- Whenever possible avoid exposure to those who have respiratory illnesses.
- 4. If you have frequent colds, or if you are generally "run down," ask your doctor about preventive measures against respiratory infections.

REMEMBER, too, what seems to be a cold in a child often turns out to be the beginning of measles, whooping cough or some other communicable disease. So, it is always wise to keep a child with a cold at home to protect others as well as himself. The communicable diseases are most contagious in this early stage.

Metropolitan's new booklet, Respiratory Diseases, gives additional information to help improve winter health. Clip and mail the coupon below for your free copy.

Metropolitan Life
surance Company
(A MUTUAL COMPANY)

I MADISON AVE., NEW YORK 10, N. Y.

Metropolitan Life Insurance Co.

1 Madison Ave., New York 10, N. Y.

Please send me the free booklet, 156-S

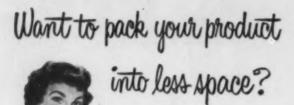
Respiratory Diseases.

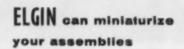


Name.

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facts, will do much to further our mutual understanding-one of the first objectives of Canadian diplomacy.

L. B. PEARSON

THE SECRETARY OF STATE FOR

EXTERNAL AFFAIRS

OTTAWA, ONT., CANADA

## Altering an Old Process

Dear Sir:

I was pleased to note the somewhat extended review of the paper which I presented before the Assn. of Iron and Steel Engineers in September in Chicago [BW-Nov.26

'55,p58 . . .

Desiliconizing of hot metal is a very old process which has been conducted for years in duplex steel plants by means of blowing air through molten pig iron. My work only involved altering this old process by using pure oxygen instead of air to prevent the absorption of detrimental nitrogen in the steel and to heat the hot metal to a temperature which would greatly accelerate the rate of melting in an open hearth furnace. .

Your discussions of refractory costs are misleading. The refractory problem in the desilconizing of hot metal as conducted in my process would not generate as high temperature as is encountered in the full blown oxygen converter process. Refractory costs in the full blown oxygen converter are less than half the present refractory costs in standard open hearth furnaces. Refractory costs for desiliconizing should be even lower. . . .

Your review has a serious error in comparing the estimated cost of \$3.3-million for the necessary desiliconizing equipment to serve a plant now producing one million tons of steel per year. This figure should not be compared with the \$300 per ingot ton now required for building a completely integrated open hearth steel plant. .

The \$3.3-million quoted in my paper would only generate an increasing capacity of 400,000 tons a year and should be compared with a figure of about \$12-million, which would be the cost of new open hearth equipment necessary for the production of 400,000 tons of ingots per year. This is based on a figure of \$30 per ingot ton of open hearth melting equipment exclusive of blast furnaces and finishing mills. . . .

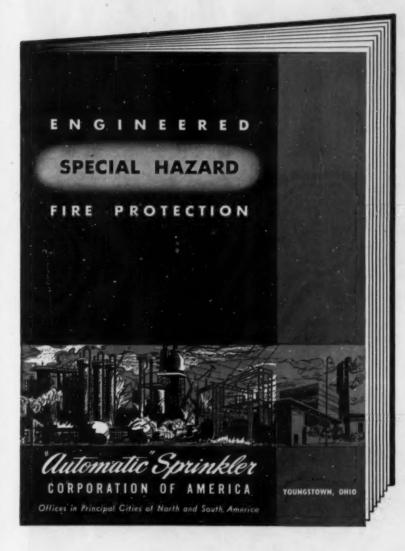
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HEAD, DEPT. OF METALLURGICAL ENGINEERING

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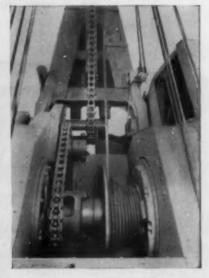
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# **BUSINESS OUTLOOK**

BUSINESS WEEK JAN. 7, 1956



Investors greeted 1956 in the stock market as much as to say, "Well, it is a new year, sure enough."

Perhaps the faint-hearted were taking to the sidelines, just to "wait and see." Or some profit-taking may have carried over for want of losses to match against gains in last year's trading.

Anyhow, the first session of 1956 didn't look much like the General Motors-led boom that greeted infant 1955.

Businessmen as well as stock traders seem a little less rampantly optimistic now that the new year really is under way.

This is good; a bit of realism lessens the chance that the boom will be carried to dangerous extremes.

Greater caution in planning production is most apparent in autos.

Schedules now call for a few more than 2-million new cars in the first quarter. This would be only a modest expansion over 1955's fourth quarter and a cut of about 300,000 from earlier expectations.

However, there's nothing tiny about 2-million cars in any given three-month period. Any quarter that big was a whopper until 1955 began rewriting the record book.

Not many car makers will try to push back up to the peak output levels of November, but few are as frank about it as Ford's Mercury Division, which this week announced a layoff of 2,450 workers.

The cut is "to reflect current market conditions" and to assure dealers of "an adequate but not excessive level of stocks."

Purchasing agents' lives won't be any easier, even though home building has declined and auto schedules are being trimmed.

Supplies of steel, flat glass, rubber, nonferrous metals all remain very tight. Few orders will be canceled, even though some users may have contracted for more than they will need right away.

Yet it's a market whose "tone" could change—in which the unwary might wind up overloaded by the time summer comes.

Prices of nonferrous metals show how the pressures persist.

Lead, for example, was advanced half a cent a pound the end of last week. But London prices immediately swung up again to a premium over New York—so another half cent was tacked on here at midweek.

And this is in the face of what appears to be reduced automotive demand, both in original equipment batteries and for solder.

Malaya's failure to settle its civil strife sent prices of tin sharply higher in world markets, and other metals weren't far behind.

Zinc hasn't been so strong as lead in London trading, but it has done very well. And the persistent labor troubles in Chile have helped maintain the tension in copper.

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK JAN. 7, 1956

Many users of aluminum feel relatively secure against a price advance because the metal was marked up not long ago. However, they may not be entirely justified. Alcan has just raised prices to all but its customers in the U. S.—and that kind of thing has been known to put ideas into the heads of some producers in this country.

Success of such a boost, though, would depend on Alcoa's attitude.

Even in steel there will be an incentive to buy as far ahead as seems safe in order to get protection against price advances.

Iron Age suggests this week that base prices are likely to move up an average of \$3 a ton by March. That would be followed, presumably, by a much larger rise after the signing of a new wage contract in June.

Steel operations this week, incidentally, are placed at barely 96% of capacity compared with virtually 100% before the holidays—but we're getting about the same amount of metal.

It always happens at this time of year, and you know the answer:

The industry adds up all facilities, including additions made in the past year, to get a new capacity figure; the operating rate drops, but not the output.

Rated capacity now is 128,363,090 tons, up 21/2-million in a year.

Producers of flat glass aren't expecting relaxed demand from autos and housing to help them catch up with customers' needs. They figure on more help coming from new capacity soon to be available.

For now, they're sold out. And they see construction of schools and industrial and commercial structures taking up any slack.

Price increases no longer are dominantly in products used by industry. Sears, Roebuck's spring catalog, out this week, reflects an average markup of about 2% on the consumers' goods it offers.

Advances are general on home furnishings and specialty items, but appliances and apparel are about the same as a year ago.

Bankers generally look for some easing in credit, as usual, between now and Easter (even though inventory buying may work against it).

Last year there was no seasonal slack, business loans rising by \$1-billion in the first half of the year. And, despite tight money, the second half saw a more-than-seasonal rise of \$3-billion.

Business loans of the Federal Reserve member banks that report each week wound up the year by topping \$26½-billion.

Direct controls on mortgages are having the sharpest impact of any credit restraints.

New mortgage loans by savings and loan associations, the biggest lenders, fell 6% below year-earlier levels in November.

Commercial banks not only fell behind on new loans, but before the yearend they had even begun to reduce their total holdings.

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# FIGURES OF THE WEEK

1947-49=100 150	. 1947-49-10
140	14
20 ~~~	130
10	1955
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n .	1					§ Latest Week	Preceding Week	Month	Year Age	Average
<b>Business</b>	Week	Index	(above)			*148.8	†149.8	148.3	133.6	91.6

PRODUCTION					
Steel ingot production (thousands of tons)	2,373 121,632 \$58,066 10,751 ††6,987 1,713 N. A.	†2,309 †177,250 \$63,148 11,614 6,992 †1,763 286,600	2,416 213,506 \$57,228 11,359 6,836 1,806 286,926	1,960 148,436 \$51,139 9,425 6,343 1,717 140,640	1,281 62,880 \$17,083 4,238 4,751 1,745 167,269
TRADE					

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	71	71	75	65	82
	46	48	55	41	53
	+21%	+6%	+10%	+17%	+30%
	174	181	209	152	22
PRICES					

PRICE					
Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	406.0	404.9	405.3	415.5	311.9
Industrial raw materials, daily index (U.S. Dept. of Labor BLS, 1947-49 = 100)	102.0	1101.9	101.2	90.3	1173.2
Foodstuffs, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100)	75.0	74.7	74.6	90.5	1175.4
Print cloth (spot and nearby, yd.)	20.7€	20.8€	20.8€	19.0€	17.5€
Finished steel, index (U. S. Dept. of Labor BLS, 1947-49 = 100)	155.3	155.1	154.6	144.6	1176.4
Scrap steel composite (Iron Age, ton)	\$53.33	\$53.00	\$49.50	\$34.17	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.)	43.975e	43.369¢	43.375e	30.000€	14.045€
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$2.28	\$2.25	\$2.17	\$2.47	\$1.97
Cotton, daily price (middling, 14 designated markets, fb.)	33.77€	33.79€	33.61¢	34.00e	**30.56¢
Wool tops (Boston, lb.)	\$1.70	\$1.70	\$1.70	\$2.02	\$1.51

PINANCE					
90 stocks, price index (Standard & Poor's)	358.9 3.63%	359.7 3.63%	361.7 3.60%	286.5 3.45%	135.7 3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	3%	3%	27%	11-11%	3-1%

BANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	58,865	158,739	56,900	58,445	1145,820
Total loans and investments, reporting member banks	86,741	186,846	85,337	86,534	++71,916
Commercial and agricultural loans, reporting member banks	26,701	126,627	26,014	22,486	+19,299
U. S. gov't guaranteed obligations held, reporting member banks	30,122	130,260	29,643	36,902	1149,879
Total federal reserve credit outstanding	27,420	27,101	26,012	26,433	23,883

MONTHLY FIGURES OF THE WEEK	Latest	Proceding Month	Year Ago	1946 Average
Private expenditures for new construction (in millions)	\$2,410	\$2,632	\$2,263	\$803
	\$767	\$985	\$829	\$197
Manufacturers' inventories (seasonally adjusted, in millions)	\$45,551	\$45,265	\$43,270	\$21,238
	\$35,059	\$34,640	\$29,209	\$6,704
Installment credit outstanding (in millions)November	\$27,247	\$26,963	\$22,014	\$3,174

<sup>\*</sup> Preliminary, week ended Dec. 31, 1955. \* Revised.

<sup>††</sup> Estimate.
\*\* Ten designated markets.

N. A. Not available at press time.

8 Date for "Latest Week" on each series on request.

# in BUSINESS this WEEK ...

#### GENERAL BUSINESS:

GM'S TRAIN TRIES OUT FOR LIGHTWEIGHT RACE. But GM still won't say if it's in to stay..p. 26

OUT OF THE FRYING PAN. New French Assembly strengthens extremists, and leaves only a hope of wobbly centrist governments.....p. 27

THE BEST CHRISTMAS EVER. Retailers broke all

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MAKING AN INDUSTRY IN THE NORTH. In Canada, Rio Tinto's big-money deal puts stability into uranium business......p. 29

THE BOWLS AND HOW THEY GROW. Not only football has become big business around New Year's Day—promoters are adding all kinds of other spectacles, too.....p. 30

ATOM PLANE ENGINE NEARS TEST. Reports leaking out of Pentagon indicate prototype reactor is ready for preliminary testing......p. 32

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#### FINANCE:

FIRE PATROL BOWS OUT. Fire patrols financed by fire insurance companies are becoming scarcer. p. 78

#### GOVERNMENT:

#### LABOR:

AFL-CIO: INFLUENCING PEOPLE.
The new federation must live down

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HALF A BILLION IN FEES AND DUES. That's the annual take of the unions, according to estimates by the National Industrial Conference Board. Half the dues of locals go on to the parent internationals...p. 44

IN LABOR. News about independent oil unions, back pay for retail clerks, speedier arbitration .....p. 46

#### MANAGEMENT:

AN END TO FINANCIAL INNO-CENCE. Management training tries

The Pictures—Bettman Archive—78 (bot.); Grant Compton—48, 49, 50, 110, 11 (6); Walter Curtim—29 (right); Allan Gould—30, 31; Martin Harris—120; Herald Tribune—111 (right cen.); I.B.M., Ltd.—60 (top); Jayhawk Motor Co.—8; Herb Kratovil—Cover, 90, 98, 114; Lake Eric Eng. Corp.—56; Match From Gamma—119; Moreland Corp.—58; N. Y. Daily News—78 (top); Nickel Plate Road—60 (bot.); Mickey Pallas—26; U. P.—27 (third down); W. W.—27 (3).

to end execurive ignorance of corporate finances .....p. 66

THE MANAGEMENT PATTERN. A larger dose of economics is prescribed for training tomorrow's business managers ......p. 70

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THEY WERE SAYING AT AMA . . . Independents gain . . . Competition helps department stores . . . Salesmen are headed down . . . . . p. 96

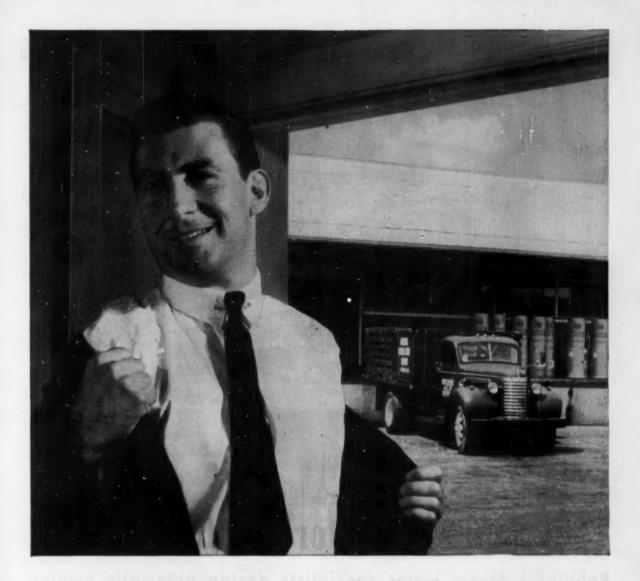
THE MARKETING PATTERN. GE's cut in margins points up dealers' changing role, emphasis on volume instead of high markups.....p. 74

#### THE MARKETS:

WALL ST. TALKS.....p. 104

#### PRODUCTION:

REVERE DOES AN INSIDE JOB ON METAL. New process is developed for fabricating tubes into a sheet of metal ......p. 48



# WE DON'T STOP WITH THE DELIVERY OF A CHEMICAL— we put it to work and keep it working effectively

The chemical treatment of metals and metal parts—to prepare them for further processing, to protect them, to beautify them—has grown from a haphazard operation to a highly technical one. Supplying the chemical ingredients is a relatively simple job. Putting them to work and keeping them working effectively in your plant demands the skill of an experienced organization. We have that organization.

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That's why we say, "We don't stop with the delivery of a chemical—we put it to work and keep it working effectively." And we have been doing this for over 40 years. Write for a booklet describing ACP products and services.

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# They Said This Motor Couldn't Be Built!

# Robbins & Myers motor specialists design automatic awning motor that six other motor manufacturers said couldn't be made

The most important single factor in producing any motor-driven product is to get the right motor for the job.

The Automatic Awning Co, of America recognized this fact and set out to find a motor manufacturer that could build a motor to meet the requirements of their product. The motor had to be small and light, had to have high torque and constant speed, and it had to operate on a low-voltage system.

Six motor manufacturers said it couldn't be done! Not until Automatic Awning gave the requirements to Robbins & Myers was the problem solved.

The result? A rugged, compact motor that develops over 150 inch-pounds of torque after a gear reduction of the output shaft to 70 R.P.M. The three-wire, reversible, capacitor-type motor operates on a 30-volt 60-cycle system. Over-

all dimensions of motor and gearing are  $4 \times 4 \times 5\frac{1}{2}$  inches; the unit weighs less than 8 pounds.

If you have a motor-driven product, it will pay you to check with us at Robbins & Myers. Our motor design specialists are equipped to do a fast, thorough, economical job of custom-designing a motor that is exactly right for your product.

If the problem can be solved with a standard motor, R & M can supply you with a wide choice of types and sizes of complete motors or matched motor parts.

Don't settle for an "off-the-shelf" compromise. For complete information—no obligation, of course—write Robbins & Myers, 1939 Lagonda Ave., Springfield, Ohio—Dept. BW.

# **№. ROBBINS** & MYERS, INC.

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Fractional & Integral HP Motors & Generators



Household Fans



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Pumps



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# The Capital Waits On the Doctors

The business of election year politics got off to a wheel-spinning start in Washington this week.

• The Eisenhower Administration began laying out a legislative program designed to keep lawmakers busy up to campaign time. There was heavier stress on spending than in any previous program of this Administration.

 Congress came back to work, and Democratic leaders announced plans to investigate Republicans and the influence of businessmen in the Administration. Of the work that's to be done, some is routine, and some is of major political significance (see chart).

But there were few signs that leaders of either party were prepared to start pressing new projects right away. Everything that happened this week in connection with the opening of Congress added up to the dropping of one shoe. Spokesmen for both parties are waiting for Pres. Eisenhower to drop the other one—by announcing his personal plans for the campaign.

 Slow Motion—Whether he will run or not is the overriding question in Washington. Until it is cleared up, both the legislative program of the Administration and counter-moves of Democrats will bog down.

The State of the Union message was to be read to Congress on Thursday. The budget message will be delivered Jan. 16. Next will come the President's economic report. Special messages are being prepared in the White House on farm aid, federal aid to schools.

But until the doctors turn in another report, and Eisenhower's exact role is made clear, Congress won't do much more than talk about the new legislation the Administration wants adopted.

• Plan of Campaign—The strategy behind the Administration's proposals is clear enough. By midweek, even before the flow of messages began, it had revealed a program of stepped-up spending across a broad front (BW—Dec.31 '55,p68). This is a way of getting double mileage out of politically appealing pro-

The Administration's design is to make the popular Eisenhower philosophy the philosophy of the GOP. The

program was planned:

• By the White House staff and by key Cabinet members, with approval

# The Deadlines Congress Must Meet

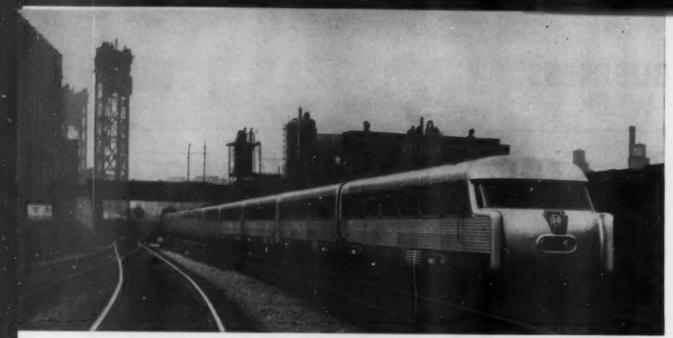
The Deadline The Program at Stake

- On Feb. 15 · · · Federal funds to states for the polio vaccine program will cease.
- On Mar. 31 ... The 52% tax rate on corporate income will drop to 47%.
- On Mar. 31...Agriculture Secretary will lose his authority to dispose of government-owned surplus dairy products by any method he thinks necessary.
- On Apr. 1 ... Increased excise taxes imposed during Korean War on gasoline, motor vehicles, special fuels, distilled spirits, wine, beer, cigarettes, and tobacco will end.
- On Jun. 30 . . . Commodity Credit Corp. will have to quit spending \$50million yearly on milk-for-school children program.
- On Jun. 30 · · · Federal Reserve banks will no longer be able to buy direct or fully-guaranteed obligations of the U.S., either in the open market or directly from the U.S., without regard to maturities.
- On Jun. 30 . . . Mutual Security Program (military and economic aid) will
- On Jun. 30 . . . Public Debt limit will drop from \$281-billion back to \$275-billion.
- On Jun. 30 ... Pentagon will lose its authority to transfer U.S. military equipment now in Japan to Japanese forces.
- On Jun. 30 · · · Suspension of certain import taxes on metal scrap will cease.
- On Jun. 30 . . . Office of Defense Mobilization will go out of existence, along with Defense Production Act of 1950.
- On Jul. 1 . . . . Armed services will lose their authority to undertake offbase construction during a war or national emergency.
- On Jul. 31 · · · · Federal Housing Authority won't be able to enter into new contracts for loans and annual contributions for up to 45,000 additional public housing units.
- On Sept. 30 . FHA's home repair, modernization and improvement, and military housing programs will stop.
- On Sept. 30 . . Rules under which Washington and the states match funds for public assistance will cease operating.
- On Dec. 31 . . . The government will lose its right to renegotiate defense contracts.
- On Dec. 31... Import quotas on sugar, under Sugar Act of 1948, will end. (The House has already extended the quotas, now the matter is pending in Senate Finance Committee.)

DOUSINESS WEEK

of party leaders in Congress. Eisenhower, of course, gave everything the final O.K., but his convalescence kept him from taking a leading role in the preparation of messages. Thus, the shift is a bit away from Eisenhower to the Republican Party as a whole.

 To help win the election whether Eisenhower runs or not. If the party finds itself with another candidate, then the emphasis on welfare is counted on to show that GOP is not the party of the rich, as Democrats claim.



Using aluminum bus bodies mounted for rail travel . . .



POWER to pull GM's Aerotrain at more than 100 mph. comes from 1,200-hp. diesel.



"AIR RIDE" for smoothness uses four airfilled rubber beliews at each axle.

# GM's Train Tries Out For Lightweight Race

The Aerotrain above, General Motors Corp.'s somewhat bashful entry in the railroad passenger car sweepstakes, got into the lightweight train race this week with a clatter that seemed to mean business and that put something of a scare into other entrants.

The hoopla set everyone asking the question: Does GM really mean to get into the railroad car building business? At the moment the giant auto company makes only diesel-electric locomotives—but it has become by far the biggest producer of these. And its Aerotrain is made up largely of GM components already in mass production.

 Coy—But GM, with two test-model trains completed and starting over the rails, continued to play coy—as it has since word of the new train leaked out last year. GM at first expressed reluctance to build the model trains at the request of a group of railroad presidents, and agreed only when guaranteed full control of design and construction.

This week, GM still wasn't talking about its intentions.

It does, however, plan during the coming year to lease the trains for tests to a number of roads with widely varying operating conditions. The New York Central RR and the Pennsylvania RR (pictures) got first crack, and both made the most of it with ceremonies, speeches, and special trips.

• Design—GM's answer to the problem of how to halt mounting railroad deficits from passenger operations is actually a string of aluminum bus bodies mounted on steel railroad underframes. It's designed and built for operation as a complete unit; and as a result the coupling device and air hose connections have been simplified. The weight of the train is also expected to remain fairly constant—10 cars with seating for 400 passengers—hence GM was able to supply it with the minimum power needed to exceed 100 miles an hour.

• Components—For the train General Motors used its own already available components wherever possible:

 The car sides are standard body panels used in the Truck & Coach Div.'s 40-passenger intercity bus.

 The "air ride" cushioning (bottom picture) is another Truck & Coach development.

 The locomotive, though housed in a new exterior, is a regular Electro-Motive Div. diesel.

In the locomotive's nose are two standard auxiliary power units for lighting, heating, and cooling requirements. Air conditioning in the cars, as in GM buses, is handled by Frigidaire Div.

 Cutting—According to GM, its Aerotrain has reduced train weight by more than 50%, train investment by 60%, and train maintenance and operating expenses (excluding crew costs) by nearly 60%.

"It is not, however," a company official admits, "luxury equipment."

That's because the train is designed for a special purpose: to increase rail travel by lowering fares. And lowering fares meant sacrificing luxury in favor of "simplicity and economy."

• Splurge—Though simplicity and economy may have been the slogans for GM designers, they definitely weren't for Central and Pennsy publicity staffs. The Central hired a big New York advertising agency to publicize its train and organize the guest list for the first trip.

list for the first trip.

Illinois political figures, presidents

of Chicago companies, and representatives of the press were invited to assemble at 7 a.m. in a Chicago station to watch a champagne bottle get smashed across the "bow" of the Central train, then streak to Detroit for lunch and exceedes.

lunch and speeches.

In Washington, James M. Symes, Pennsy president, laid plans for a ceremony to receive the Pennsy train's throttle from N. C. Dezendorf, vice-president of General Motors. Shortly afterward, Symes was to hand the throttle over to the train's engineer to guide it, with its complement of government and railroad officials and press representatives, to Philadelphia for dinner and speeches.

# French Lineup



JACQUES DUCLOS Directs Communist strategy

# Out of the Frying Pan

France heads for even more troubled times as voters flock to extremes. New Assembly weakens hope of any but wobbly center coalitions.

Frenchmen trooped to the polls last Monday in unprecedented numbers and left France in worse political shape than ever. The National Assembly they elected promises to be more unmanageable than the last.

On the basis of complete returns from metropolitan France (the overseas votes are not in yet) it seems clear that the French electorate has:

 Destroyed the parliamentary basis for the right-of-center coalition that has governed France most of the time since 1951—destroyed it without giving the anti-Communist, left-of-center parties enough strength to take office.

 Brought to life a completely new political force—the potentially Fascist movement of Pierre Poujade, which won 49 seats and replaced the Gaullists as the Assembly's right wing.

 Given the Communists almost as big a popular vote as in 1951, despite today's great prosperity and higher real wages; this popular support translated itself into 145 Communist seats in the new Assembly as against 93 in the old.

As these disturbing trends became known, the French business community reacted sharply and typically. Values on the Paris Bourse slid 10%, the value of the franc in terms of dollars by 5%. Gold prices rose.

• The Prospects—Washington, London, and Bonn were upset by the uncertainties produced by the election returns. At the worst, either chaos or a government including the Communists lies ahead in France. At best, there will be a shaky government, unable to act decisively in North Africa

or give strong support to NATO and to Franco-German cooperation.

Only Moscow was pleased—so pleased that Pres. Voroshilov took the unprecedented step of congratulating the French Communist party on its victory.

Premier Edgar Faure, who headed the right-of-center coalition that has governed France for the past year, had figured on a different result. By calling a snap election (the vote wasn't legally due until June) he hoped to strengthen his coalition and in the process block the ambition of ex-Premier Pierre Mendes-France to turn the Radical Socialists into a dynamic mass party.

· Electoral Law-Faure thought he could pull this off without changing the 1951 Electoral Law-a law that was used to advantage against the Communists and Gaullists when the center parties went into the election of that year closely allied. Under the 1951 law a political party may form an electoral alliance with other parties in each electoral district, and then the allied parties can pool their votes. If such an alliance gets 51% of the vote in any given district it takes all the seats and then splits them proportionately among the allied parties. If an alliance doesn't get 51% or if there is no alliance, the seats are divided proportionally among all parties.

Last Monday Faure had the tables turned on him by this system, plus popular discontent with his record of "politics as usual." Instead of getting the 300 seats it expected, Faure's coalition got about 200. The Communists, on the other hand, gained 52 seats making their representation in the Assembly roughly proportionate to the size of



PIERRE MENDES-FRANCE Holds key position



EDGAR FAURE Loses his gamble



PIERRE POUJADE Rises from obscurity

their popular vote. The Poujadists also took seats that they couldn't have won had the center parties gone into this election as closely allied as they were in 1951.

For his part, Mendes-France went into the election bitterly opposed to Faure and closely allied, in the "Front

Republican," with the Socialists.
This bloc ran on a platform of (1) a quick, liberal solution in North Africa; (2) economic and social reform at home; and (3) a constitutional reform that would give France a strong executive. Under Mendes-France, the radical Socialists gained something like 30 seats. Although the Socialists lost six, they increased their popular vote slightly. Among the anti-Communist parties, the Mendesites and Socialists made the best showing-winning together between 160 and 170 seats.

· Strategic Spot-Despite his success, Mendes-France doesn't have enough strength to form a government. On the other hand, he's in a strategic position. No government can be formed now unless it includes his party and the

The problem is whether the "Front Republican" can join forces with Faure's followers and the Popular Republicans.

There is one thing that might force these hostile elements together, at least temporarily-France's desperate need for a quick solution in North Africa.

Such a government, assuming it were formed, would be short-lived at best. Mendes-France is determined to get constitutional reform via a new electoral law and new elections. And he is likely to push this question to an issue once some progress has been made toward a

North African settlement.

· Poujade-It isn't merely the new strength of the Communists in the Assembly that confronts the democratic parties with the choice of either getting together on basic reforms in North Africa and at home or of seeing French democracy go down the drain. The rise of Poujade and his tax rebels brings an entirely new element to the French

political picture.

In place of the Gaullists, who may have been extremely conservative but were still republicans, you now have the Poujadists-a group whose whole philosophy is anti-parliamentary. Pou-jade, who didn't bother to run for Parliament has called the National Assembly a "pigsty." His backing comes in large part from the same kind of disgruntled petit bourgeois who gave Hitler his chance in Germany. It's too much to say that Poujadism is a real threat to France today. But it could be if the democratic parties can't find a way out of the political instability that has weakened France ever since World War II.

# The Best Christmas Ever

Once again, retailers broke all pre-holiday sales records. As a dividend, they face the new year with reasonable inventories and the prospect of a continuing boom.

"It was such a good Christmas," said the manager of one Atlanta department store, "that I had to take a week off to

The Atlanta store isn't the only retailer still spinning from the impact of the heaviest pre-Yule spending in the country's history (BW-Dec.17'55,p32). From coast to coast come happy echoes, as merchants look at depleted or empty shelves and wonder where they'll dig up the stock for the traditional January sales.

What was destined to be the biggest Christmas ever got off to an early start (BW-Nov.26'55,p42), rolled up to a record-breaking finale. According to the Federal Reserve Board, over-all department store sales for the last hectic week -which included an extra shopping day because Santa came on Sunday-were 21% ahead of the corresponding 1954 period. Sales for the year through Dec. 24 were up 7%. Individual stores claim gains ranging from 4% to 22%.

· Gripes-In a spot check of how the different cities fared, BUSINESS WEEK reporters heard only three sour notes:

Dallas stores are disappointed that their sales ran only about 3% ahead of 1954, instead of the 5% to 7% antici-

Omaha retailers ended up with a slight increase, broke even, or had a 3% to 5% decrease from 1954's Christmas business. Some blame the dip on the fact that Nebraska's corn crop was down \$250-million last year.

Des Moines sales fell off as much as 10% from 1954's, partially due to de-

clining hog prices.

Elsewhere, retailers-with a weather eye on the nation's bulging pocketbooks -gauged their inventories to meet the demand. They explain that in 1954 they bought carefully because of the uncertainty of business in 1955. They bought more in 1955, but sales were up to expectations in most departments.

· Into January-With stocks in good shape, stores are set to push their January white sales and markdowns as a matter of selling strategy rather than necessity. More than one wily merchant has discovered that the time to catch the bargain hunter is immediately after Christmas, when he comes in to exchange a gift, or to spend the fat bonus he received from his employer. One large store in Charlotte, N. C., reports that sales the day after the Christmas holiday were 36% above the store's sales for the day after Christmas, 1954,

Now Charlotte stores are calling the final week of December the "thirteenth month.'

In Knoxville, heavy buying the first day stores reopened after Christmas showed up in bank clearings totaling nearly \$3-million. Two department stores had to reorder on several lines. · Yardstick-Just how drastic the Janu-

ary sales will be depends pretty much on how accurately the individual stores predicted their Christmas business. Where inventories are high, there'll be fine hunting for bargain seekers; but where stocks are depleted, it will be mostly a matter of pushing specials.

In Cleveland, for example, indications are that there will be few bona fide markdown sales. Reason is, there's little shop-worn merchandise on the shelves. In many cities, inventory was so depleted that merchants already are rushing to fill in the holes.

On the other hand, Boston-which had the best Christmas in its historydidn't fully satisfy the rosy outlook of merchants earlier in the season. They expected a landslide of business, with more spectacular advances over 1954, and stocked accordingly. Now, thrifty Bostonians are having a field day with markdowns. Store managers claim that that way they'll be able to clean out the surplus inventory in two weeks.

· Eyes Ahead-One reason that merchants are in a hurry to clean off their shelves is that Easter falls on Apr. 1, and most of them already have placed orders for the pre-Easter rush.

· Suburbia Horns In-The only visible cloud in the sky, for the downtown stores at least, is the fact the suburban shopping areas are taking more and more of the business. A Cleveland department store admits that its branch stores ran as high as 20% ahead of 1954, but insists that this is just plus business for the downtown store.

A Chicago mail order and retail chain says that the farther north of the city its store is, the better it did on

Christmas sales.

Two San Francisco stores with suburban branches, The Emporium and Macy's, reported a better increase for the outlying branch than for the downtown store. Both stores felt the bad weather had a lot to do with it.

Detroit, weathering a newspaper strike, isn't surprised that, with no newspaper ads to guide them, shoppers went to suburban stores to look around, rather than go all the way downtown.



BRITAIN'S Earl of Bessborough, Rio Tinto chairman, joins . . .



BROOKLYN'S Joseph H. Hirshhorn, uranium promoter, in . . .

# Making an Industry in the North

Time began running out fast this week for what's left of Canada's pickwielding uranium prospectors and freewheeling uranium speculators. The chill shadow of big-money men fell over their small operations when news came that Rio Tinto Co., Ltd., an 82-year-old London mining organization, had focused a large new part of its attention on Canada.

The company disclosed it would merge its Canadian mining interests with those of Joseph H. Hirshhorn, the New York promoter who brought in North America's largest uranium camp, in the Blind River field in Ontario (BW –Feb.5'55,p66). This would give it control of some 40% of private enterprise's contracted uranium production in Canada.

The deal has not yet been buttoned up tight. But if it does go through, it should have just the same meaning for Canada's uranium business as Floyd Odlum's operations (BW-Dec.24'55, p28) have had for the U.S.' uranium business. It should bring a new stability and solvency to the mines, with wide mining experience and marketing knowhow.

• Marriage of Opposites—"It should be a good marriage," is promoter Hirshhorn's summing up of the deal. But it would be a marriage of incongruous partners. Rio Tinto is a conservative outfit. Its chairman is the Earl of Bessborough, Governor-General of Canada from 1931 to 1935. Hirshhorn is a cigar-smoking Brooklynite with an eccentric flair, a rough tongue, and a propensity for profitable investments.

The Premiums—Still, closing of the deal would be a happy occasion for both.

Hirshhorn, reports say, would get \$15-million in cash, a 45% interest in the new company, plus possible tax advantages.

And it's the kind of deal Rio Tinto has been seeking since 1954. The company was founded in 1857 by British businessmen who bought the Spanish Rio Tinto copper and pyrite mines at auction; since World War I, it has invested earnings in Rhodesian copper exploration and mining. In 1954, the company sold control of the Spanish mines to Spanish banks for some \$22.5-million. Quickly, Rio Canadian Exploration, Ltd., was set up. A minority partner—with 45% interest—in this enterprise was Sogemines, Ltd., a Belgian group.

Rio Canadian Exploration's operations underwent a big change a year ago, when it began moving into Canadian uranium. It made its move just when Hirshhorn was looking about for financing to bring his Algom Uranium mines into production.

But corporate changes were in order first. The London company sold its interest in Rio Canadian Exploration, Ltd., and set up Rio Tinto (Canada) Ltd. In return for a maximum of \$57.6-million in debentures, bank loans, and

stock purchases, Rio Tinto got control of Algom until the debt is paid off.

 Assorted Gains—And now Rio Tinto has made its big plunge. Properties it will get through its new deal with Hirshhorn include:

 Pronto Uranium Mines, Ltd., an established producer with a \$55-million government production contract.

 Anglo-Rouyn Mines, Ltd., with a copper potential in Saskatchewan.

 Preston East Dome Mines, Ltd., a gold mine that Hirshhorn has used to finance some of his operations.

 Oceanic Iron Ore of Canada, Ltd., which has taken out 300-million tons of ore in the Ungava area.

• Wild Days Ended—Rio Tinto has made its big leap at a time when most of the steam has leaked out of Canada's uranium speculation. Chief factor in quieting the speculation was Trade & Commerce Minister C. D. Howe's ruling that after Mar. 31, the government will make no more premium price contracts, and that mines seeking contracts before that deadline must prove they can be in production by Apr. 1, 1956. Right now, the Algom and Pronto mines' contracts total \$262-million of the \$557-million worth that Ottawa has granted.

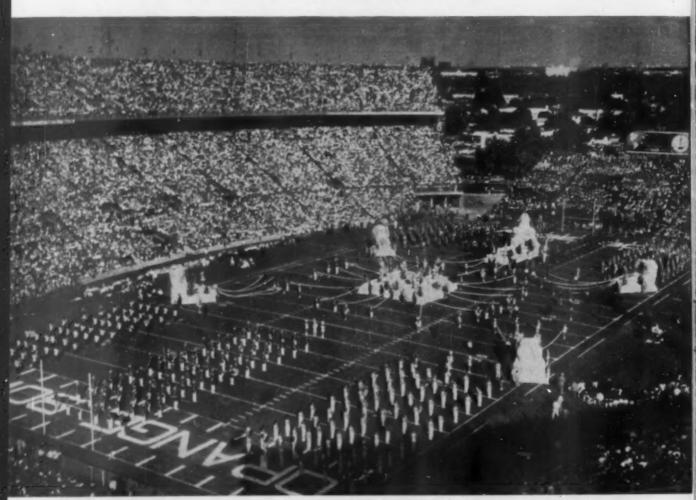
Some Toronto brokers are talking of better-than-expected profits from a few of the mines, but nothing they have said has caused much excitement. It looks as though the wild days of Canadian uranium are finished.



LONG queues kept cash registers tinkling at Miami eating places.



BIG and fancy floats in the New Year's Eve



MAIN EVENT was the football game, with the pageantry of floats and bands at half-time.



parade entertained visitors.



LOTS OF shirtsleeves appeared in the 73F sunshine to tantalize TV viewers.

# The Bowls and How They Grow

Last weekend, Americans celebrated the new year in their latest style, the potpourri of football, tennis, basketball, speedboat racing, pageants, queens, cheesecake on parade, and chamber of commerce boosting that all adds up to the bowl craze.

Nearly half a million fans attended the weekend's dozen football games, while another 50-million followed the action on TV or radio. Every major bowl game was a sellout weeks ago; the four biggest bowls alone took in \$2.5million in ticket sales, radio-TV rights, cuts from concessionaires. It was football's finest hour-but still not its last. This Saturday, another game is being played: the Senior Bowl in Mobile, Ala. · Still Growing-The name "bowl game" comes from Pasadena's Rose Bowl-oldest, most famous, and occasionally the best of the lot. First in 1902 and continuously since 1916, the Rose Bowl game made such a hit with people who never get enough of football-and people who never get enough of football fans' money-that the idea has bloomed all over the South and Southwest, sporadically even in the Midwest and Alaska.

The Rose Bowl game started as an adjunct to a small, informal parade of flower-decked buggies and surreys by members of the Valley Hunt Club in Pasadena. It brought national attention to this display of flowers at a season when most of the country is wrapped in cold and snow. Now the game overshadows even the colossalized Tournament of Roses, the latter-day out-

growth of the neighborhood floral parade.

Meanwhile, the younger bowls, mostly dating from the mid-30s, started with football and are following the opposite course from the Rose Bowl. They are busy rounding out their spectacle with other sports, parades, and mint-new "traditional" eye-catchers.

### I. The Orange Bowl

Miami's Orange Bowl is a good example of how a prosperous young bowl is run. It grew from a tiny acom.

The University of Miami, founded in 1926, began looking for a way to build up its football prestige and hence its national reputation. For New Year's Day in 1933 and 1934, it invited Northern colleges down to Miami for exhibition games. The event was called the Palm Festival, a title quickly dropped when the game went commercial.

The games from 1935 on were taken over by the Miami Chamber of Commerce, which saw a means of raising the curtain on Florida's winter season earlier than the customary end of January. A few more than 5,100 customers saw the 1935 game. They sat in stands built from secondhand lumber left behind by the American Legion's national convention the previous autumn.

For the first few years, the Chamber's Orange Bowl Committee had to be



SIDE EVENTS were everywhere, like this speedboat regatta.

careful to pick nearby colleges to play, since they often had to dig down in their own pockets to meet the guarantee

of expenses.

• The Contrast—Last weekend, the oak was mighty, indeed. A record crowd of 76,561 crammed the enlarged stadium (originally built by WPA in 1937); the game took in \$623,576.48, net. Ticket sales grossed \$441,033.75, netted \$396,608.82 after taxes, \$336,576.48 after the stadium rent had been paid. TV and radio rights brought \$275,000, and sales of programs, \$12,000.

The National Collegiate Athletic Assn. sets the take for the teams at 75% of the net. This gives \$233,841.-18 apiece to the Universities of Oklahoma and Maryland (Oklahoma won, 20-6), and \$155,894.12 to the Orange Bowl Committee for all expenses.

The two colleges don't get to keep their \$233,841 intact. Maryland had to split with other members of the Atlantic Coast Conference, with an extra share for itself; Oklahoma is bound even more strictly to keep no more than any other school in the Big Seven Conference. The idea in the Big Seven was to keep a bowl-playing college from fattening up its football power at the expense of its league rivals—yet Oklahoma has won the title nine years in a row.

 The Backers—The Orange Bowl Committee consists of 54 businessmen of the Miami area who serve without pay and without expense accounts. The committee has 10 full-time employees and eight or nine part-time workers the

year round.

Its budget goes for lots of things you'd never think of: \$23,000 for the half-time show and the beauty queen contest, \$9,500 for entertaining eminent visitors, \$6,000 for movies of the game, \$5,000 for sending the University of Miami band to a game in Pittsburgh. The fund usually about breaks even.

There's a separate fund for the Orange Bowl Festival—New Year's Eve parade and post-game fireworks and pageant, plus the speedboat regatta, junior tennis tournament, and the basketball tournament that was inaugurated this year. The festival fund, drawn partly from Miami and Miami Beach city treasuries, amounts to \$85,000.

 The Payoff—The principal profit from the Orange Bowl and its festive surroundings comes from the flood of visitors who formerly stayed away until the racing season in late January.

Says Ernest E. Seiler, general manager of the Orange Bowl Committee: "We figure a minimum of 75,000 people are drawn to the Miami area. They spend anywhere from three days to two weeks here—the average is probably five days. Each spends an average of \$30 a day. Then there's the public-

ity, which for a state that depends on tourist business is priceless."

#### II. And More Bowls

So it goes at bowl-time. The Rose Bowl drew 100,809 customers Monday to its 42nd running. The Sugar Bowl in New Orleans drew 80,175 for its 22nd game; the Cotton Bowl in Dallas staged its 20th game for 75,504 onlookers.

And then there were the Gator, Sun, Tangerine, Prairie View, and Salad Bowls, the East-West and the Blue-

Gray all-star games.

 Sewed Up—Most of the bowls nowadays are tied up with contracts to take the winners of certain conferences: the Rose Bowl with the Pacific Coast Conference and the Big Ten; the Cotton Bowl generally with the Southwest and Southeastern Conferences; the Orange Bowl with the Atlantic Coast and the Big Seven. The Sugar Bowl plays the field, as do some of the minor bowls.

The Cotton Bowl, begun as a private enterprise by J. Curtis Sanford, who is now a real estate developer in Dallas, has long lagged in adding the sports and pageant accessories to the football game. However, Felix R. McKnight, managing editor of the Dallas Morning News and president of the Cotton Bowl Athletic Assn. that took over from Sanford in 1941, says he and the 26 directors plan soon to stage a week-long spectacle.

The Sugar Bowl gives New Orleans its biggest week aside from Mardi Gras, with basketball and boxing tournaments and track meets along with foot-

ball

# Atom Plane Engine Nears Test

Veil of secrecy surrounding Air Force project lifts as reports leak out that prototype of nuclear reactor built by GE will be tested soon at AEC station in Idaho.

Ten years of work on developing an atomic engine for aircraft finally is beginning to pay off. You can see that in hints that began leaking out of the

Pentagon last week.

Reports from Washington indicate that full-scale tests of a prototype of a nuclear reactor to power an airplane are imminent. These hints represented the broadest breach yet in the veil of secrecy that has surrounded this Air Force-sponsored project since its inception right after World War II. It's now apparent that the secrecy stemmed, in part at least, from the fact that little progress had been made on atomic aircraft until the last year or so.

 Ready for Tests—Now it appears a prototype of atomic engine for aircraft has been built by General Electric Co. Full-scale tests will be run soon at Atomic Energy Commission's National Reactor Testing Station at Arco, Idaho. Non-reactor portions of the plant—the turbine, valves and pumps already have passed preliminary tests.

Completion of the prototype was the second recently disclosed landmark in atomic aircraft development. The other was the revelation a month ago that an atomic reactor had been carried aloft for the first time in the remodeled nose of a B-36 superbomber. It was flown about for radiation test purposes, and had nothing to do with propulsion.

GE's aircraft reactor apparently is designed to supply heat directly to a jet engine. This eliminates the necessity for a steam circuit and electric generating equipment of the type used for land-based or naval atomic plants. Atomic scientists long ago abandoned such gear as too cumbersome for aircraft.

Successful tests for the GE plant would not mean a nuclear-powered airplane in the air in the next year or two. Such an aircraft appears at least three

or four years away.

• Shielding Problem—That's because reactor tests alone will take upward of a year. Then there is the problem of shielding—to protect plane crews and the area over which the plane flies. There is no hint this problem has been worked out satisfactorily. A guess is that the atom plane will have a fantastically long fuselage with the rayspitting engine at one end, the crew at the other.

Major Air Force contractors working on the atomic plane besides GE include the Pratt & Whitney Div. of United Aircraft Corp., Curtiss Wright Corp., Boeing Airplane Co., Convair Div. of General Dynamics, and Carbide

& Carbon Chemicals Co.

 Navy Program—Last year the Navy also began an atomic aircraft program.
 Some authorities believe the first nuclear aircraft may be a giant seaplane—a plane landing and taking off on water would require less shielding than a craft operating from land bases.
 The Navy's major contractors are Allison Div. of General Motors, GE Nuclear Development Corp., Curtiss Wright, and Carrett Corp.



Sinclair's Junior Board of Directors gets first hand information on marine transportation operations abound the new company tanker, the P. W. Thirtle.

# Training Today's "Mates" to be Tomorrow's "Captains"

Capable executive talent doesn't just grow; it must be cultivated. The Sinclair organization is assuring itself a continuation of experienced qualified management by bringing its younger executives up against top-level matters on a unique Junior Board of Directors.

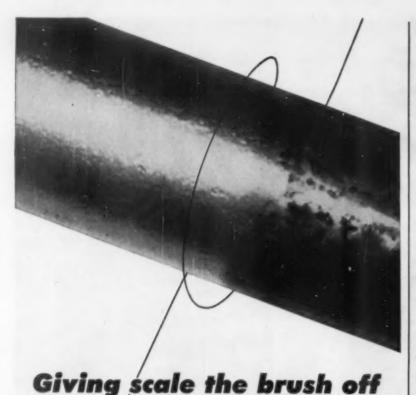
Created five years ago by P. C. Spencer, President of Sinclair Oil Corporation, the Junior Board has a rotating membership of promising men representing all phases of operations carried on by the corporation's subsidiaries. By considering problems and proposals that cut across departmental lines, the Board exposes its members to the broad spectrum of organization operations, giving them valuable experience beyond the specialized field of their immediate departments. Further, this mixing of men and ideas brings to bear on Board business the cross section of knowledge needed to produce effective decisions.

The Board meets once a month in New York to review

reports from working committees appointed to make intensive studies of problems assigned by top management. Field trips like the one shown above are also made to promote a better understanding of the practical side of operating problems.

The Board's work load is heavy and its responsibilities real. Sinclair's top management and senior board rely on the Junior Board's findings and have yet to turn down a major recommendation. Men develop by broadening their knowledge and using that knowledge to make responsible decisions. Sinclair is confident today's mates will prove able captains tomorrow.





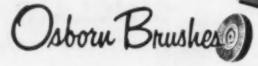
Automatic Brushing Machine inserts end of tube between brush rolls . . . cleans rotating tube on predetermined cycle . . . stops and ejects tube.

SCALE and hardened preservative oil must be removed from the ends of boiler tubes prior to welding. Automatic Osborn power brushing proved the simplest and most economical cleaning method.

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An Osborn Brushing Analysis, made in your plant, will show how you can improve metal cleaning operations with power brushing. Write The Osborn Manufacturing Company, Dept. A-71, 5401 Hamilton Avenue, Cleveland 14; Obio.

COMPLETE DATA—For information on power brushes and brushing methods, write today for Osborn Catalog 300.





BRUSHING METHODS . POWER, PAINT AND MAINTENANCE BRUSHES OSBORN BRUSHING MACHINES . FOUNDRY MOLDING MACHINES

#### BUSINESS BRIEFS

Trading stamp plan is being junked by Sears, Roebuck, after a scant one-year tryout. The company's only comment: "It hasn't worked out as well as anticipated." Complete liquidation of the plan, set up in five Illinois cities, will take another six months.

Fast tax write-off has been closed by the government to makers of commercial planes, freight cars, and electrical equipment. Thirty categories remain on the extra-fast depreciation list set up by the Office of Defense Mobilization.

California "fair trade" law has been upheld by the state Supreme Court. The rulings, involving Scovil Mfg. Co. and General Electric, helped solve the bruises of the retail price maintainers, who have been pummeled in some state courts (BW-Dec.31'55,p54).

Passenger traffic by air in 1955 topped long-haul bus transport, says the jubilant trade group, Air Transport Assn. Airline figures, lumped together, show nearly 21.4-billion passenger miles for the year, against a guess by bus sources that their roughly comparable services added up to something less than 18-billion passenger miles. Now the airline people dream of surpassing all noncommuting rail passenger traffic in 1956.

Foes of higher freight rates got a recruit, but no surprise, when the National Coal Assn. asked ICC to block the 7% boost sought by the railroads for Feb. 25 (page 84).

Grow, grow, grow! Three of Mother Bell's chicks-in Illinois, Pennsylvania, and the Mountain States-plan to spend \$483-million among them on expansion in the next two years. . . Gas & Electric has scheduled \$130-million for new construction this year. . Reynolds Metals Co. plans a \$115-million financing-including new preferred stock-to pay for its seventh aluminum reduction plant.

Dehydration: The Pennsylvania RR, pulling its horns out of non-transportation business, has sold six water companies in Pennsylvania and one in Delaware to General Waterworks Corp. The price: just under \$5-million, plus a promise to supply the Pennsy with water it needs.

Those luxury cars: Ford Motor Co. says it is boosting production of its snazzy Continentals from 16 a day to 20. By the end of 1956, Ford thinks that about 4,000 prosperous citizens will be rolling in Continentals.

## John Henry is Dead!

John Henry was a steel driving man, and he died with his hammer in his hand.

Many years ago (so the legend goes), when the Big Bend tunnel was being built, John Henry matched his mighty hammer against a new steam drill — and he won at the cost of his life. Today, he's a song and a memory in the pageant of American folklore.

John Henry's day is done. A power shovel dug his grave, and machine tools have replaced his brawn. For the giant swing to higher skills, more pay, and less and less hours of work is the inevitable course of human destiny.

The manufacturers who are most successful today in balancing rising wages with lower production costs are invariably those who know most about the modern science of plant operation and machine tool replacement.

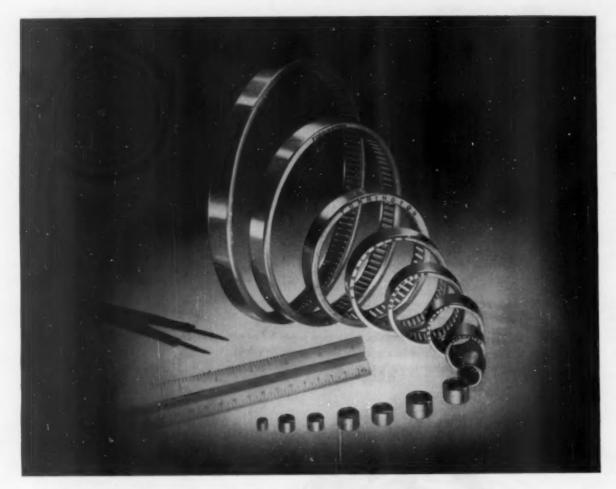
No other machine tool builder can equal Jones & Lamson's industrywide experience in reducing costs and increasing profits with high velocity metal turning & grinding equipment.





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## WASHINGTON OUTLOOK

WASHINGTON BUREAU JAN. 7, 1956



Some political notes, as Congress gets under way:

Moderation is the keynote, in both parties. The question is how long this can last. The Republicans take their line from Pres. Eisenhower, despite the doubt about a second term. The Democratz are committed by their leaders to much the same line. But if Eisenhower does stay in the race, you will see the Democratic moderates shift to the left to make issues and to avoid the appearances of a "me too" contest.

Uncertainty about Eisenhower's plans dominates all thinking. Members of both parties agree, generally, that the President still has a huge popular following and can, if he wishes, be reelected. No one claims to know what the Eisenhower decision will be. But interviews with returning members of the House and Senate show a change from 60 days ago.

Republicans show more confidence. They had feared an early announcement by Eisenhower. And they knew that an early statement of plans could mean only that Eisenhower would not run again. As each day passes, their hopes rise. All party plans are on the assumption that the President will run.

Democrats are less sure about next fail. The party's earlier figuring was that Eisenhower's heart attack would rule out a second-term try, and that a Democrat could beat any would-be successor. The difference now is Eisenhower no longer is written off. More congressmen figure he may run.

Here's the Democratic dilemma: Stevenson, the odds-on bet to take the Democratic nomination, is committed to the moderation line. The big backing for this stand comes from Speaker Sam Rayburn and Senate Leader Lyndon Johnson, both from Texas. It was announced at a time when it appeared that there would be no second-term race by Eisenhower. These leaders of the Democrats were trying to step into Eisenhower's shoes. The plan was to picture any other GOP candidate, whether Nixon or someone else, as being far to the right. If Eisenhower doesn't take himself out, the Democrats must make a shift. They have no candidate who can match Eisenhower's personal popularity. They will be forced to the left to bid for votes.

As to Eisenhower's plans, there's no word at all. But observers here are reading significance into a few recent developments.

Take the Florida vacation. Last month, Eisenhower's doctors told him that he should leave Gettysburg's cold and go South, where he could get exercise to recover from his recent inactivity. Eisenhower, himself, and his White House advisers had little stomach for Key West as a spa, because it would identify him politically with the Truman era of casual, sport-shirted respite. Lacking any other place to go—security reasons, adequate quarters, and so on govern such things—the President stubbornly decided he would just stay in Washington, and go to work. (The weather at Augusta, Ga., was too uncertain, and anyway, he wasn't well enough to play golf.) Then, late one afternoon, the Key West decision came, and Eisenhower left the next morning.

What happened? No one who knows will talk about it. But the speculation generally accepted is this:

## WASHINGTON OUTLOOK (Continued)

WASHINGTON BUREAU JAN. 7, 1956 The doctors turned on the heat. Though they were satisfied with the repair of the President's heart, they still felt he needed exercise in the sun in order to build up the strength they wanted before he returned to harness. Their advice overcame the political objections to Truman's Key West.

The President's activity at Key West was that of a man who likes politics. He didn't just ride over to the naval base. When his plane landed, he used a car in which he could stand and wave on the ride to his quarters. Politicians attach importance to this. Florida has become a "border state." And it wasn't long ago that Democratic challenger Stevenson made a visit there. Observers read into the maneuvers another sign that Eisenhower can't be written off.

The role of brother Milton Eisenhower makes talk. There's no secret about the fact that the President regards his young brother as a "brain." It may be nothing more than gossip, but Penn State's Pres. Eisenhower is pictured as feeling that it would be a mistake for his brother to retire to his farm. The recent experience at Gettysburg, so reports go, bored the President. Farm life is drab in the winter. Many members of the GOP top command would like you to believe that Eisenhower lost any interest he might have had in just being a local farmer. That might be true. But with no press conferences, Eisenhower can't be questioned.

Watch for legislation to ease the President's job. It will be sent up to Congress by the White House early in the session.

The idea is this: The President is required by law to handle much routine work—make unimportant decisions, sign official but unimportant papers. The legislation to be proposed would turn most of this over to the Cabinet members and department heads—let them handle these chores.

But any real lightening of the load will be slight. The big decisions, the real burdens of the office, can't be transferred. The cutting down on paper shuffling will only relieve the President of so-called "nuisance work." But any move that's made will be interpreted as another sign that Eisenhower will run again.

On taxes, Democrats are considering an alternative to their 1955 bill that would have upped personal exemptions.

The plan: Split the first rate bracket—the first \$2,000 of taxable income—into two brackets, of \$1,000 each. The rate on the first \$1,000 would be cut to 15%. The first bracket rate now is 20%. The theory behind this is that it would give greatest relief to low income taxpayers, without the narrowing of the income tax base, which would result from the old plan of raising personal exemptions.

The cut would run into big money. Income in the first bracket is the widest part of the income stream. The split rate would leave consumers with about an extra \$3.2-billion—and cost the Treasury that much.

The program for the session will shape up slowly. The Democrats have the power to determine the order of business. And until they have a better feel on whether or not they will face Eisenhower in the fall, they will be slow in pushing ahead on politically important issues.



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# How Hot Is Frozen?



#### SIZZLING!

1955's housewives are buying five times as much frozen food as the shoppers of '47. Everything from fish sticks to broccoli—frozen—more than seven billion pounds a year.

A drop in the bucket. Wait till tomorrow's housewives go to market!

First, there'll be more of them . . . the numbers reaching "market age" (20-24) will climb some 30% in the next decade. They'll have richer tastes, too, and the money to indulge them. As early as 1959 the "over \$5,000" families may account for 60% of all spending; in them the frozen foods manufacturer will find his prime target.

His biggest weapon? Packaging! His package is his salesman.

And Marathon is his friend...has been from the start. Marathon came up with protective packaging that made frozen food specialties practical. Marathon ideas simplified the marketing...enlivened the displays. It was packaging, as much as the food itself, that built the boom in frozen.

For tomorrow, Marathon will continue to offer producers two most important advantages. One, complete control of quality and costs: Marathon handles every step in package making, from tree to finished product. Second, new ideas: Marathon has more people than ever before engaged in package research.

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# Things look bright where MARATHON goes to market



larathon packages brighten the stores...

Northern home products lighten the chores

## **AFL-CIO: Influencing People**

 For years, labor planted suspicion of bigness in business. Now the merged federation is faced with carrying the "big labor" tag.

Labor leaders say they aren't worried. George Meany calls AFL-CIO "the only monopoly for the greatest good of the greatest number."

And the new federation will actually spend less on public relations than AFL and CIO spent separately.

Merger has compounded a public relations problem for the AFL-CIO. The label "big labor" was not exactly spawned by the merger, but it is sure to be flung oftener and perhaps more effectively from now on.

Bigness has long been used in American politics as a bugaboo. The foes of "big business" have played on the suspicions of the American people, often with telling effect at the polls, in the legislatures, and in the courts. Labor has been among those who have exploited a public suspicion of bigness. Now the shoe is on the other foot.

The opposition—notably the more conservative wing of the Republican Party—is on the offense. It has already accused labor of using slush funds for a giant political conspiracy. Farmers are resentful, even hostile.

All this holds an ominous potential for labor in the 1956 elections and in the state and national legislatures.

• Not Always Acute—Contrary to widely held views in the business community, labor leaders have not been specially blessed with an acute sense of public relations. For instance, they were scarcely aware of the depth of national feeling against them in 1947. When the Taft-Hartley law hit them that year, they were stunned.

But Dedicated—How the labor leaders gauge their public relations problem is not entirely clear, but apparently they don't think it is critical. They have a sublime belief in the righteousness of their cause, and this appears to color their whole reaction to criticism.

George Meany, addressing one of his many New York audiences during the AFL-CIO convention week, was retorting to a typical attack when he declared, in effect: If this is going to be a monopoly, it will be unique—"It will be the only monopoly for the greatest good of the greatest number."

• Proud of Size-There is some sensitivity to size in the AFL-CIO, but not

enough to affect policy. For example, the standard introduction for the premerger AFL five-a-week radio program was: "Ladies and gentlemen, 10-million Americans bring you Edward P. Morgan and the news." The merger outmoded the "10-million" figure, and somewhere along the line it was suggested that this was an opportunity to stop calling attention to size.

The suggestion was vetoed and the figure "15-million" was substituted.

The explanation probably lies in a little-known discovery of the former AFL education department. In conducting local union quizzes, it found that the question everybody got right was the total membership of the AFL unions. How did everybody know this? They had heard it on the radio.

• Budget—Spending for public relations will be less, not more, under the merged budget. Net costs will be in the neighborhood of \$1-million a year. About three-fifths of this will go to two radio programs.

On the face of it, this budget may appear small for a program that is directed (1) inwardly, to keep AFL-CIO unionists aware of the federation's many-faceted activities, and (2) outwardly, to influence public support for the federation's economic and social projects.

However, AFL-CIO can count on reaching a multimillion audience on many an occasion without having to spend a cent. There is a lively interest in whatever Meany, Walter Reuther, or other leaders have to say on controversial issues. These men are in demand for television interviews. Their statements make newspaper front pages far more frequently than those of their counterparts in industry. Probably the most important public relations efforts of the federation can be put across in this way, without cost.

 Work at Grassroots—So the money in the budget can be held to the minimum needed for continuous radio and other activities—to include expanded community services programs, in keeping with a Meany theory that "public relations begin at home."

Aside from these, the AFL-CIO is relying on a rather routine approach to the public relations problem.

The department of education under John D. Connors operated on a meager \$80,000 last year in the AFL. Merger will give it only a little more, to take care of the salaries of the old CIO staff.

The other principal links between the federation and the public, including its own members, are the department of publications and department of public relations.

 Publications Staff—Publications is headed by Henry Fleisher, formerly CIO public relations chief. He is staffed with 18 people, professional and secretarial.

The bulk of the staff gets out the 12- to 16-page AFL-CIO News, which Fleisher expects to brighten up for the benefit of direct readership, as well as for other union papers that depend on it for stories and pictures. The News costs a net of about \$175,000 a year, exclusive of salaries. Its circulation starts at 150,000—mostly to international and local union leaders.

The Federationist, a slick-paper monthly edited by Bernard Tassler, is also under Fleisher's supervision.

In addition to these publications, intended principally for unionists, the federation will publish-like AFL and CIO before it-pamphlets and other special material whenever there is a major issue on which AFL-CIO wants to make its position clear. And it will circulate, through the proper departments, research letters for a limited internal audience and monthly reports on economic, political, and other issues for AFL-CIO leaders down the line. These also find their way to outsiders in government, academic, and journalistic circles who might help mold public opinion in labor's way on key issues. · PR Staff-Philip Pearl heads a department of public relations staff of seven. He is Meany's principal spokesman, as he was before the merger. His job is to get the federation's story into

newspapers, magazines, and on the air.

The federation has no long-range program of public relations or high-flown goal of achievement.

In Pearl's opinion, all that is necessary is for labor to be understood for what it is, and then it will be accepted. END

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### Teamsters' GAW

It has been working in St. Louis area since 1952, but employers are unhappy on some points.

Since 1952, Teamsters Local 688 in St. Louis has negotiated 45 guaranteed annual wage contracts, covering some 3,500 warehouse workers. Under its agreements, employees are assured 2,000 hours of work or pay each year—even if they are idle because they refuse to cross another union's picket line.

When Local 688 signed its pioneering GAW contract with Brown Shoe Co., the provision for payments to those who are idle because of picketing stirred strong employer resentment. In the three years since, much of this feeling faded as Local 688 spread its GAW plan through the St. Louis area. Now it's welling up again.

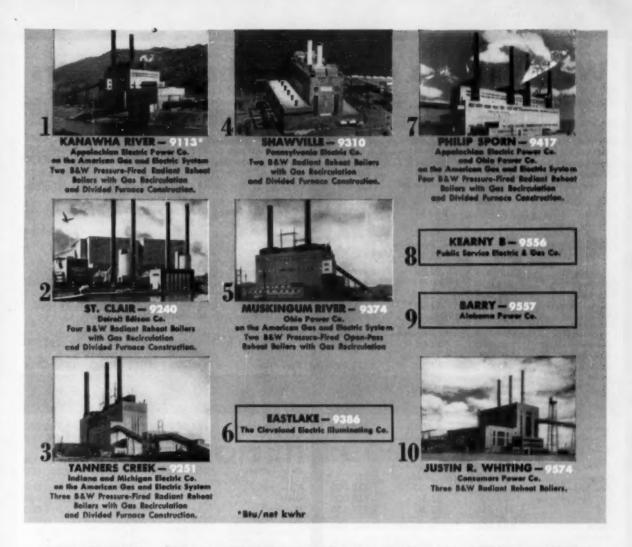
The reason is the local's recent successful claim for pay for Brown Shoe warehouse employees who refused to cross picket lines during AFL and CIO production workers' strikes.

• How It Happened—The production unions walked out of International Shoe Co. and Brown Shoe on Nov. 10. They picketed warehouses as well as plants. In St. Louis, Local 688 refused to pass through the picket lines. They stayed off their jobs for three weeks.

When work resumed, Local 688 cited its GAW contract with Brown Shoe and demanded pay for the time lost during the picketing. The company estimated that all GAW-protected warehouse workers had put in full time up to the start of the strike, and would work full 40-hour weeks after it. This would assure them 1,960 hours' straight-time pay for all of 1955. The GAW guarantee is for 2,000 hours, so Brown Shoe paid off only for the difference, 40 hours, and for an unworked paid holiday, Thanksgiving Day.

Local Teamsters officers hailed the payment as proof that the GAW plan could operate successfully under "test conditions," and employer criticism of pay for a refusal to work started up in St. Louis all over again.

• A Second Look—Meanwhile, the percentage coverage of Local 688's guarantee plan is under scrutiny in a number of St. Louis plants. The common contract clause provides that a certain number of high-seniority workers will be assured the 2,000 hours of work or pay. The percentage varies from practically all (as in the case of Brown Shoe) to about 50% to 60% of the total in other plants. Some employers who have trouble keeping the required number busy want the percentage cut.



#### LEADERS IN POWER PRODUCTION EFFICIENCY

Annual plant net heat rates of the ten most efficient central stations in the United States in 1954—as reported by the Federal Power Commission—are led by Kanawha's record 9113 Btu per net kwhr. This means that Kanawha River Station requires only 9113 Btu of heat energy from fuel to produce one kilowatt-hour of electricity—far, far less than was required just a few years ago. This improvement is being carried out simultaneously with tremendous expansion of economical electric power.

These ten stations are strong vindication of the foresighted utilization of major engineering advances which are taking this nation so far and so fast along the road of power generation progress. The development of these advances has been possible only through the efforts of the electric companies and their primary suppliers working cooperatively to provide more electricity more efficiently.

In most of these leading stations, B&W Boilers with

advanced engineering features are contributing substantially toward achieving the remarkable efficiency levels reported. For example, at Kanawha the B&W vertically-fired Radiant Boiler units utilize pressure firing, Cyclone Steam Separators, divided furnace construction and other B&W engineering achievements.

Just behind the ten leaders are more plants—many with B&W Units—producing abundant, economical power across the country.

Welcoming its responsibilities, B&W continues to combine almost a century of experience with the practical results of an extensive research and development program in the effort to achieve still higher levels of steam-electric generating efficiency.



## **What Unions Get From Their Members**

Union	Declared Membership	Minimum Monthly Dues	Annual Income From Dues (at minimum)
Actors Equity	6,695	\$2.00	\$160,680
AFTRA Musical Artists	20,000	No minimum \$2.50-\$13.33	60,000
Chorus Equity	4,500	\$1.50	81,000
Screen Actors	8,000	No minimum	-
Agricultural	8,500	\$1.50	153,000
Pilots Airline Com-	9,500	\$5-\$25	570,000
munications	1,500	\$2.00	36,000
Asbestos Workers UAW-CIO	8,000	Locals determine \$2.50	42,543,510
UAW-AFL	100,000	\$2.00	2,400,000
Bakery Workers	172,000	\$1.85-\$2.70	3,818,400
Barbers	70,000	\$3.00	2,520,000
Barber & Beauty	5,000	\$2.00	120,000
Boilermakers .	150,000	\$2.25-\$2.75	4,050,000
Bookbinders	54,000	Locals determine	
Brewery	62,000	\$2.00	1,488,000
Bricklayers	100,000	No minimum	
Brick & Clay	23,000	\$3.00	828,000
Bldg. Service	205,000	\$2.00	4,920,000
Carpenters Chemical	750,000	\$1.25	11,250,000
Workers	91,001	\$2.00	2,184,024
Cigar Makers	10,000	\$1.50	180,000
Cleaning & Dye Clothing Workers	20,000 385,000	Locals determine	
CWA Coopers	330,000 4,200	Locals determine	
Die Sinkers	4,000	\$2.50-\$3.00	120,000
Distillery Workers	25,000	\$2.50	750,000
UE	317,655	\$2.50	9,529,650
BEW	625,000	\$1.20-\$4.00	9,000,000
Elevator			
Constructors	10,000	Locals determine	4 400 000
Operating Engrs.	187,180	\$2.00	4,492,320
Technical Engrs. Federal	15,000	\$1.50	270,000
Employees	100,000	\$7.00 per year	700,000
Fire Fighters	84,000	Locals determine	
Firemen & Oilers	60,000	\$2.00	1,440,000
Flight Engrs.	1,550	Locals determine	
Foremen	20,000	\$1.50	360,000
Furniture	50,000	\$2.00	1,200,000
Garment Workers	40,000	\$2.00	960,000
ILGWU Glass Workers	439,277 47,150	\$1.72 1% of wages	9,066,677
Flint Glass		1% of gross	
Workers Clave Workers	35,000	earnings	F 1 000
Glove Workers	3,000	\$1.50	54,000
Gov't. Employees		75€	540,000
Grain Millers	35,000	\$2.00	840,000
Plant Guards	7,000	\$2.50	210,000
Guards Union Handbag	5,200	No minimum	
	32,000	\$2.50	960,000
Workers	32,000		
Workers	35,000	404-504	168,000

*			
Union	Declared Membership	Minimum Monthly Dues	Annual Income From Dues (at minimum)
Hosiery Workers	30,000	\$2.15	\$774,000
Hotel Employees	413,446	\$2.50	12,403,380
Insurance Agents	15,000	\$3.00	540,000
Insurance	12 000 *	\$3.00	432,000
Workers	12,000*	Locals determine	432,000
Iron Workers	141,000	\$2.00	411,264
Jewelry Workers	17,136		411,204
Lathers	15,000	Locals determine	2 000 000
Laundry Workers	100,000	\$2.50	3,000,000
Letter Carriers Rural Letter	103,000	Locals determine	
Carriers	36,273	Locals determine	
Lithographers	29,350	\$3.50	1,232,700
Locomotive Engrs.	77,197	Locals determine	
Firemen	100,000	No minimum	
ILA-Ind.	65,000°	Locals Determine	
Longshore-AFL	15,000	\$2.50	450,000
ILWU	65,000	Locals determine	
Machinists Maintenance of	848,794	\$1.00-\$2.00	10,185,528
Way	240,000	581/3€	1,680,000
Marine Engrs. Marine &	12,000	\$5.00	720,000
Shipbuilding	55,000	\$3.00	1,980,000
NMU	43,500	\$5.00	2,610,000
Masters, Mates,		*****	-,
Pilots	9,000	\$4.00-\$5.00	432,000
Meat Cutters	250,000	75¢	2,250,000
Mine, Mill	100,000	\$1.00	1,200,000
UMW	600,000	\$4.00	28,800,000
Molders	84,000	\$2.00-\$3.50	
Musicians	248,109	Locals determine	2,016,000
Newspaper Guild	27,000	\$1.50	
	27,000	\$1.50	486,000
News Deliverers	4,022	\$7.50	361,980
Office Employees Oil, Chem. &	50,000	\$2.00	1,200,000
Atomic	162,000	\$2.00	3,888,000
Packinghouse	132,000	\$2.00	3,168,000
Painters	208,189	25∉-\$3.00	624,567
Papermakers	74,000	Locals determine	
Paperworkers	50,000	\$1.50	900,000
Pulp, Paper, Sulphite	140 053	\$2.00	2 672 472
Pattern Makers	148,853	\$2.00	3,572,472
Photo Engravers	12,000	\$3.00 No minimum	432,000
Plasterers	60,000	Locals determine	
Plumbers	201,343	\$2.25	5,436,261
Postal Clerks-	,0-0	02.20	5,450,201
AFL	115,000	Locals determine	
Postal Clerks-	,000	Locus determine	
Ind.	38,000	Locals determine	
Postal	30,000	Locus defermine	
Supervisors	19,887	Locals determine	
Postal Transport	28,000	\$5.75	1,932,000
Dist. Postmasters	20,000	\$4-\$8 a year	
Potters	30,000	No minimum	960,000
Pressmen	98,000	Locals determine	
Radio Assn.	2,000	\$10.00-\$16.67	
	2,000	\$10.00-\$10.0/	240,000

Union	Declared Membership	Minimum Monthly Dues	Annual Income From Dues (at minimum)
RR Signalmen	15,500	\$2.00	\$372,000
RR Telegraphers	66,000	75¢-\$1.50	594,000
RR Trainmen	207,439	Locals determine	
RR Yardmasters	4,500	\$4.00	216,000
RR Carmen	106,700	\$2.00-\$2.50	2,560,800
RR Conductors	32,000	Locals determine	
RR Patrolmen	3,275	\$1.50	58,950
RR & SS Clerks	356,540	\$2.00	8,556,960
Retail Clerks	250,000	\$2.00	6,000,000
RWDSU	140,000	\$2.00	3,360,000
Roofers	13,000	\$3.00	468,000
Rubber Workers	185,988	\$2.00	4,463,712
SIU	70,000	Affiliates deter.	.,,
SUP	10,000	\$5.00	600,000
Sheet Metal	32,000	\$3.00	1,152,000
Shoe Workers	000,00	\$2.50	1,800,000
Boot & Shoe	50,000	\$1.75	1,050,000
Shoe & Allied	6,925	\$1.72	142,932
Porters	14,000	\$4.00	672,000
Stage Employees	42,000	\$1.85	932,400
State, City &			
Town	14,000	No minimum	

Data: National Industrial Conference Board.

Union	Declared Membership	Minimum Monthly Dues	Annual Income From Dues (at minimum)
State, County &			
Mun.	100,000	\$1.50-\$2.00	\$1,800,000
Steelworkers	1,250,000	\$3.00	45,000,000
Stereotypers	10,500	Locals determine	
Stone Workers	16,000	\$3.00	576,000
Stove Mounters	10,250	\$3.00	369,000
Street & Motor		2-1-5	
Coach	200,000	\$2.00	4,800,000
Switchmen	10,100	\$1.65-\$9.18	199,980
Teachers	50,000	Locals determine	
Teamsters	1,300,000	\$3.00	46,800,000
Telegraphers	33,705	50€-\$1.50	202,230
UTWA-AFL	100,000	\$3.00	3,600,000
TWUA-CIO	361,970	\$3.23	14,029,957
Tobacco	32,000	\$1.50	576,000
Toy Workers	10,000	Locals determine	
Train Dispatchers	4,000	83¢-\$1.54	39,840
TWU	110,000	\$2.50	3,300,000
Typographers	97,741	Locals determine	0,000,000
Upholsterers	55,000	\$2.00	1,320,000
Utility Workers	80,000	\$1.00	960,000
Woodworkers	137,251	\$2.00	3,294,024

Causiness week

## Half a Billion in Fees and Dues

It's no secret that many unions are extremely wealthy or that the labor movement as a whole collects vast sums of money in dues each year. But until now, not many people outside the labor leadership have had a clear picture of the unions' financial power.

Now the National Industrial Conference Board, as part of its business research, has published a Handbook of Union Government Structure and Procedures, covering 194 unions in the U.S. and Canada. These unions claim more than 17.5-million members, including 98% of all American unionists and 75% of those in Canada. The table above is taken from NICB's collection of financial figures for these.

 Half a Billion a Year-From its analysis of the individual unions, NICB estimates conservatively that the total annual income from dues is more than \$475-million, with initiation fees and other sources of revenue boosting income past the \$500-million mark. This estimate is based on only the minimum dues prescribed in the rules of the 194 unions. Of course, many members pay more than minimum dues.

NICB points out that a little more than half of the dues money that is collected by the local unions is moved along to the treasuries of the international unions, by per capita taxes.

 Hard to Ferret Out—Unions have traditionally been close-mouthed about the scale and volume of their dues and, even more so, the exact number of members on their rolls. This reticence has hampered the Labor Dept.'s Bureau of Labor Statistics in its periodical surveys of union membership (BW—Nov. 19'55,p176). Both NICB and BLS are dependent on information from the unions themselves, but they have taken pains to sort fact from fiction.

Union leaders often prefer to show their membership as more (for prestige and power reasons) or less (for per capita tax purposes) than it really is.

In its new study, NICB kept in close touch with BLS to compare the reported membership figures. In some cases, James Bambrick, NICB labor relations specialist, and George Haas, coauthor of the new handbook, found that a union had reported two different figures. Whenever the discrepancy was large, either NICB or BLS asked the union to try again.

Thus, the membership data in the NICB handbook and the new BLS union directory may be more accurate than any previously published.

· When to Strike-Besides dealing with union membership and finances, the NICB handbook reports on union practices of discipline, electing officers, ratifying contracts, and calling strikes. The findings on strike authorization will be of special interest to employers who feel they have been subject to capricious and apparently uncontrolled walkouts. Constitutions of 137 of the 194 unions surveyed by NICB required some form of approval from the international union before striking. Penalties for wildcat walkouts range from "no financial support" for the striking locals to 'expulsion from the parent union."

NICB also finds that about 110 unions require a vote of members, secretly or not, before a strike can be called. This bears on a long argument over whether or not unions should be required by law to hold secret strike votes among their members.

Under standard policy of NICB, routine distribution of the new hand-book will be to NICB members only, but libraries and educational institutions can also get copies on request. As a follow-up to this study, NICB is printing a sourcebook containing extracts from union constitutions that were studied.



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WHEN BUSINESS MEN WANT BUSINESS NEWS THEY TURN TO BUSINESS WEEK

## In Labor

## Independent Oil Unions Pool Plans for Mutual Defense

Thirty independent oil unions have worked out preliminary plans for coordinated bargaining in 1956—and for their mutual defense against the aggressive Oil, Chemical & Atomic Workers (AFL-CIO). Oil unionists who attended the recent merger meeting held by independents in St. Louis (BW-Dec.31'55,p67) decided to press for loose federation of independent oil unions.

The first step will be a convention called for Jan. 20-21 in Baton Rouge. Coordinated bargaining for higher wages and increased fringes for workers in refineries, oil fields, and oil distribution will be high on the agenda. Considerable attention will also be given to OC&AW's efforts to take over independents.

The AFL-CIO union tried to get independents to merge with it a year ago. When most ignored the bid, OC&AW warned it would no longer honor the jurisdictions of the independents.

Next week, the AFL-CIO oil union will attempt to take over bargaining rights for 6,000 employees at Standard Oil of Indiana's Whiting refinery—now represented by the Independent Petroleum Workers of America. The Whiting workers comprise a key group of independents, one that has held out against national unionism since 1937. OC&AW's petitioning for a National Labor Relations Board election there speeded the oil independents' decision to seek closer ties.

### Retail Clerks Get Court O.K. For \$7.5-Million in Back Pay

The California Supreme Court has ruled that members of the Retail Clerks Local 770 in Los Angeles are entitled to back premium pay for night work and holidays from Feb. 6, 1953, to date. The total amount, payable to 20,000 clerks, may run between \$7.5-million and \$10-million. However, before it is paid the Food Employers' Council, Inc., will exhaust all legal lines of appeal.

Arbitrators in a food store labor dispute in May, 1952, ruled that the Los Angeles clerks should be paid double-time for Sunday work and time-and-a-half for nights, with triple time for holidays worked. At the time, the Wage Stabilization Board had to approve any such revision in wages. A regional board in July, 1952, approved premium pay for Sunday work only. WSB in Washington had the case before it, for review, when wage controls were terminated in February, 1953.

With controls off, the Retail Clerks petitioned California courts for a declaratory judgment holding the arbitration award of May, 1952, valid in its entirety. Employers, through the Council, insisted that only the part of the award O.K.'d by WSB—that for Sunday premium pay—should be considered valid; the other provisions, not approved by the board, died with WSB, the Council argued—unsuccessfully.

California courts agreed with the union that the arbitration award was not conditioned upon WSB approval, but became effective immediately once controls ended. Council attorneys plan to ask the U.S. Supreme Court to hear an appeal.

Most large employers prepared for a possible adverse court decision by accumulating premium-pay funds in a reserve; for them,

payments will be mainly a bookkeeping problem. Many smaller operators failed to provide for payments, despite warnings of the potential high cost of a court defeat. The union last week advised these employers that it will work out an easy-payment plan for their back premium pay; it doesn't want any to be forced out of business.

#### **Mediation Service** Speeds Arbitrations

The Federal Mediation & Conciliation Service is taking steps to speed arbitration awards. Under a revised policy statement just published, FMCS provides:

· Unless parties reply to the service within 15 days after the mailing of a list of prospective arbitrators, FMCS will deem "all persons named therein . . . acceptable.'

 Arbitrators must expedite hearings and, in the future, awards "shall be made not later than thirty (30) days from the date of the closing of the hearing, or the receipt of a transcript and of any post-hearing briefs."

#### Labor Briefs

A political survey of presidents of all major unions, conducted by the Machinist, newspaper of the International Assn. of Machinists, indicates that Adlai Stevenson would draw the strongest labor support of any Democratic nominee for President, with Gov. Averell Harriman and Sen. Estes Kefauver neck-andneck far behind. Chief Justice Earl Warren was found to be the Republican most likely to attract labor votes -if Eisenhower doesn't run again.

In New Hampshire, unions have found that the state's new corrupt practices act, adopted in 1955, contained a "sleeper" bar against labor contributions to political campaigns. They plan a court test in 1956.

A 5% wage increase (5½¢ to 7½¢ an hour) in 55 New England shoe plants compromised a pay dispute and ended a strike threat this week. Plants and the United Shoe Workers (AFL-CIO) also agreed that wages will go up another 3% next January in the pact running through 1957.

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PRODUCTION

**Revere Does** 



## Inside Job on Metal

These pictures reveal the secrets of a new process developed by Revere Copper & Brass, Inc., to incorporate hollow tubing between top and bottom surfaces of a single sheet of metal. The new product is called Tube-In-Strip.

One of the most appealing features of the product is its price. Tube-In-Strip made from copper and its alloys will carry an initial flat mark-up of 12¢ per lb. over the price of a sheet or strip of metal of corresponding size. This is a lot cheaper than buying a sheet of metal and then attaching tubes to it.

Applications—The new material is expected to be used for refrigeration, air conditioning, automobile radiators, chemical and food processing, as well as

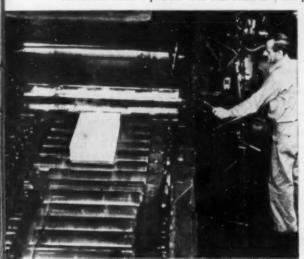
radiant panel heating, water heaters and coolers, and even electronic equipment. It also has structural applications, such as in aircraft, where the tubular sections give the metal sheet added strength and rigidity.

Two other companies—Olin-Mathieson Chemical Corp. and Reynolds Metals Co.—have products that resemble Tube-In-Strip, but they are made differently (BW—Oct.30'54,p96). In their process, tubing patterns are printed on two separate sheets, which are then bonded and rolled into a sheet in which the tubing circuit is enclosed. Revere's product comes in sheets with the tubes running in straight parallel lines along the length of the sheet. They can be



RICHARD A. WILKINS, vice-president in charge of Revere's Research & Development Dept., holds a sample of Tube-In-Strip.

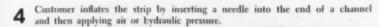
1 Key to Revere's new process for enclosing tubes within a sheet of metal are resist rods that workers are putting into a mold before the molten metal is poured. The rods crush to a fine powder when casting is rolled, making channels from which tubes are formed.

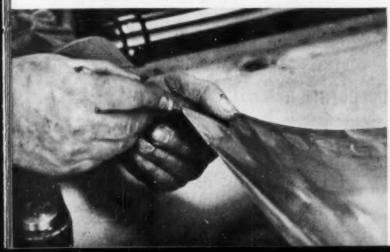


2 Hot casting is being put through rollers in the mill. The slab will get longer, but width will remain about the same.



As thickness of the slab is reduced a long sheet is produced. A strip 1,000 ft. long can be obtained from a 4-ft. casting.





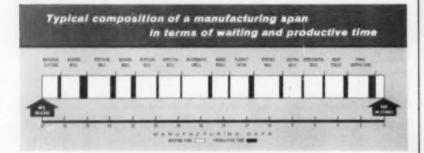
5 Operator inflates a channel to form a tube. The channels can be inflated simultaneously.



#### By-product achievements

## ON THE WAY TO AUTOMATION

The chart pertains to the large-scale job-shop manufacturing operations of one of our clients. It shows that the time to manufacture a typical part is taken up principally by waiting and handling. Only a small fraction of the elapsed manufacturing time is occupied by actual processing and machining operations. In fact, it was discovered that for most parts there is a consistent, predictable relationship in which the "manufacturing span" of the part depends only upon the number of machine and process operations.



This curious operational fact was discovered during the study phase of a program to apply modern automation techniques to the production control operations of a large manufacturing company. Actually, one of the objectives of the automation program is to search for improved machine scheduling and parts handling techniques. However, pending the solution of this rather difficult and long range problem, it was thought that significant improvements in practical production control might be effected by using an over-all scheduling formula based on the new discovery of how the factory in fact operates.

Therefore, the Ramo-Wooldridge project team, in cooperation with the customer, installed and monitored the changes in procedures necessary to implement the routine application of the new formula. The result was a dramatic improvement in the ability to schedule and control production in a complex job-shop operation involving hundreds of different end-item assemblies and thousands of different parts.

It is significant, too, that the specifications for automation equipment to handle production control based on the new and improved scheduling formula are quite different than those for equipment to handle the earlier production control procedures. Because the study program was undertaken as a first step, the customer is now assured that the equipment he acquires will be suitable for his operations.

Thus, while automation may be the primary objective, the accompanying quantitative analysis of a company's operations, which characterizes the proper systems approach, frequently leads to major immediate benefits from improved methods and procedures that are discovered on the way to automation.

If your company has a problem in automation or data processing that may need an integrated systems approach, we would be glad to discuss it with you and tell you whether we think we could be helpful.

## The Ramo-Wooldridge Corporation

BBBO BELLANCA AVENUE . LOS ANGELES 48, CALIFORNIA





TUBING can be formed into many shapes.

easily connected with other tubing.

• Developers—Richard A. Wilkins, vicepresident of Revere's Research & Development Dept. in Rome, N. Y., and his
assistant, Martin H. Dubilier, the men
who developed the process, point out
that Tube-In-Strip is processed from a
specially treated casting in about the
same way as the standard strip and roll
products of mills. It will be produced
in long rolls of strip metal in different
widths and gauges.

Channels that are later blown up into running lengths of tubes are contained in the sheet. (Revere plans to ship its product to consumers uninflated to save them shipping costs.) The channels can be made in a variety of sizes and can be spaced as desired. The web of metal between them is an efficient conductor of heat, so the product can be used for heating as well as cooling.

· Key Step-The tubing pattern is imparted to the sheet by means of rods known as resists that are set in the metal castings (picture, page 48). The rods crush to a fine powder during rolling to form channels in the sheet. The diameter of the rods and the distance between them will later determine the width of the tubes and their spacing in the sheet. Fixtures hold the resist rods as molten metal is poured in the mold. The metal is cast into cake forms, (upper left photo on page 49) which weigh 800 lb. and over, and are about 5 in. thick and 4 ft. in length. The castings are removed from the molds and are heated in furnaces until red-hot. Then they are passed through hot rolls where their thickness is reduced to 1 in.

The long metal strip is then rolled in coil form. After that it goes on to other rolling mills where the thickness is further reduced. The coils are passed through cutters that slit the sheet to the required widths before it's shipped to customers in rolled form.

· Inflation-When the customers re-

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and takes great pleasure in announcing

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WILLIAM R. EWALD JR., CHIEF OF DEVELOPMENT

State Capitol, Little Rock



How we help the "Pogo" pull itself up by its bootstraps

> The startling Convair "Pogo-Stick" uses two contra-rotating propellers to pull itself straight up. Driving the propellers is a main shaft, 4 feet long, forged by Tube Turns. This "tubular upset" of alloy steel has perfect grain flow . . . assures maximum strength with minimum weight. It's one of seventeen different parts furnished by Tube Turns for this powerful engine.

> Tube Turns provides complete facilities and complete service for custom forgings. We coordinate die design and die making, quality control, forging and upsetting, heat-treating and rough machining. Find out how we can help improve your design and cut your costs.

> > Made by the world's leading manufacturer of relding fittings and flanges for piping

LOUISVILLE 1, KENTUCKY

ceive the rolls of Tube-In-Strip, they have to inflate the channels. They do this by inserting needles into the ends of the tubes and then using air pressure for thin-walls, and hydraulic pressure for heavier gauges. Round tubes are obtained by simply applying pressure at one end, the other end of the channel being sealed. By using dies, which restrain the metal, fluted, rectangular, or other shaped tubes can be formed. All tubes in a given width of strip can be inflated simultaneously if desired. It is also possible to inflate channels on one side of the strip or sheet only, leaving the other surface

The inside of the tubing, which contains traces of the crushed resist, is easily flushed.

• The Big Problem-Developing the material for the resist rods was quite a task. The material had to crush easily to provide a smooth interior surface in the tubes, be chemically inert, corrosion resistant, and not vary in size with changing temperatures. And a material suitable for use with aluminum castings could not be used with copper, which is cast at higher temperatures.

Revere can make Tube-In-Strip from copper, brass, copper base alloys, zinc, and aluminum. But what a lot of customers want-and what Revere hopes to develop-is a sheet with enclosed tubes of stainless and other low carbon steels.

### Steckel Royalties Suit Settled by Court

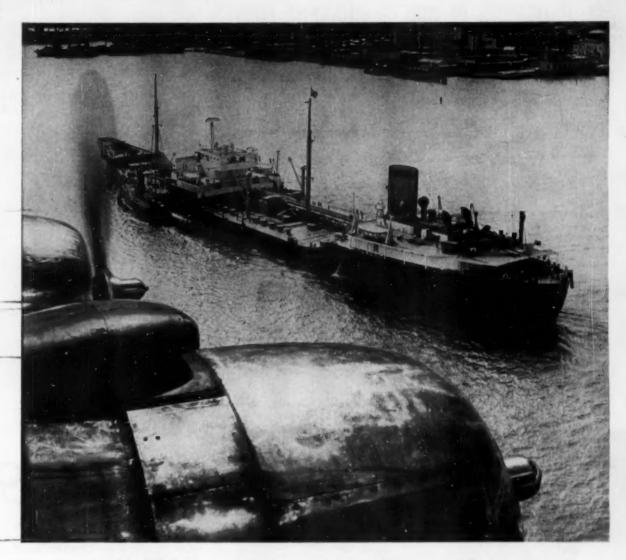
The long and bitter court battle waged between Justice Dept. and the now defunct Cold Metals Process Co. over royalty payments came to an end Dec. 28 in the federal district court in Cleveland. Justice Dept. will turn over \$4,053,000 in impounded royalties to L. A. Beeghly Fund, an educational and religious trust of Youngstown, Ohio. The foundation inherited the patent interests and royalties of Cold Metals Process when the company dissolved in

1945 (BW-Jan.19'52,p62). Cold Metals Process was formed in the late 1920s to own the patents obtained by Abram P. Steckel for a method of cold rolling steel. Some steelmakers were licensed to use the process; others used it but refused to recognize

the Steckel patent claims.

In 1943 Justice Dept. sought cancellation of the patents, contending they were obtained by fraud. Justice lost, but started another action, claiming the government was not obligated to pay royalties on its purchases of steel rolled by the Steckel process. The \$4million released to the Beeghly Fund represents royalties impounded by the court. END

W-T. M. Reg. U.S. Pat. Off.



## Making a ship ship-shape-Fast

How Emery cuts your costly repair jobs A tanker was severely damaged off Vancouver, British Columbia. After reaching port, the cargo of oil could not be unloaded because of the damage. The ship was losing \$7000 a day. Key to repairs was an electric motor located in San Francisco. Using surface transportation only, delivery would have taken 3 days. By combining air and surface transportation, Emery Air Procurement Service made delivery in only 17 hours saving at least \$14,000 for the owners. And to save still more time, the manufacturer and Emery prepared export documents while the shipment was on the way.

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## PROGRESS IN DIRECT CURRENT DRIVES

- Few electric utilities generate or distribute directcurrent power, but . . .
- Industry's trend to adjustable-speed d-c drives continues.
- Answer lies in motor-generator sets, operating from plant's alternating-current supply.





G-E MOTOR-GENERATOR SETS, shown converting alternating current to direct current in a paper mill, permit each section of the paper machine to operate at top efficiency with fast, accurate control.

## AC to DC:

Since the end of World War II industry has become increasingly aware of the benefits derived from the use of d-c motors. The tough duty cycles these motors can meet, the great flexibility they offer for controlling speed, torque, acceleration, deceleration and electric braking have aided industry in meeting some of its toughest production problems.

• D-c Availability—Although few utilities supply d-c power directly, many plants are making use of directcurrent equipment by providing their

PACKAGED CONVERSION UNITS provide dec power for integrated adjustable-speed drives. Flexible performance combined with moderate cost make dedrives, like the Speed Variators left, ideal for a variety of applications such as machine tools, textile finishing ranges, cranes and extruders and other applications where adjustable speed and precise control are required. Compact unit is easy to install.

#### THE OLD WAY

#### THE LOAD-CENTER WAY

LOAD CENTER

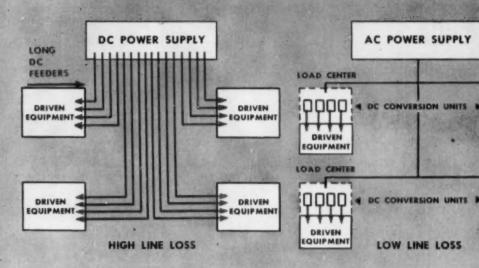
DRIVEN

EQUIPMENT

LOAD CENTER

DRIVEN

EQUIPMENT



MORE ECONOMICAL OPERATION is possible by converting a-c power to d-c at convenient load-center locations. By installing conversion units near the load, long d-c feeder lines are eliminated. Flexible d-c power is delivered to the

drive motor with a minimum of power loss. In keeping with the trend to load-center conversion, a new concept in motorgenerator design matches kilowatt ratings exactly to drivemotor requirements and to the a-c prime mover hp rating.

## Conversion No Problem for Industry

own d-c power with conversion units. Today, 95% of all d-c motors purchased operate from an a-c source by means of these conversion units. Located next to driven machinery or in load-center locations, these units provide d-c power to step up production rates, make machines more versatile and reduce waste and maintenance.

 Motor-Generator Sets—M-g sets totalling hundreds of thousands of kilowatts are on the job providing plants with direct current where only a-c power is available. These sets are used extensively in adjustable-speed drives because generator-field control gives the d-c drive motor wide speed ranges, close, accurate regulation, and excellent speed characteristics under load. M-g sets also provide regenerative braking, where electric energy of drive motor armature's rotation is reversed back into the line. Feedback control is particularly adapted to the m-g set, since small signals control generator field and drive-motor speed. A recent trend in motor-generator set design matches the driven generator in the m-g set with the powered d-c drive

motor and the a-c prime mover. This close integration makes them particularly useful as components in continuous-process drive systems, as well as increasing the ease of feedback control.

• "Packaged" Conversion Units—Complete adjustable-speed drives, such as the G-E Speed Variator, include packaged conversion unit, control, and d-c drive motor. Ideal for plants where space is limited, or where flexibility and ease of installation are desirable, the Speed Variator's factory-assembled steel cabinet contains an m-g set and a-c and d-c controls. Simple push buttons govern its operation. Components are protected from ambient air by positive pressure inside steel cabinet and by forced filtration of coolant air. The Speed Variator is completely wired and tested before shipment, and can be installed in any reasonably level plant area.

Another type of packaged conversion unit, used with electronic adjustablespeed drives, employs thyratron tubes for conversion. In cases where m-g set features are not necessary, rectifying equipment will supply d-c power efficiently and economically.

Maximum Return from Investment—Many manufacturers find that
the relatively small extra cost for conversion equipment greatly increases the
return from their machine investment.
By utilizing the benefits of d-c adjustable-speed drives, they are able to
process more and better goods from a
smaller number of highly productive,
multi-purpose machines.

• Engineering Help—General Electric is able to provide the experience and services of qualified engineers familiar with the industrial motor and power problems in all branches of industry. These specialists, assigned to 149 G-E Apparatus Sales Offices throughout the country, are available for help in the selection, application and installation of d-c drives and conversion equipment to meet industry's needs. Direct Current Motor and Generator Department, General Electric Company, Erie, Pennsylvania.

GENERAL 4 ELECTRIC



SURE-STICK, NON-SLIP Permacel Masking Tape makes this man's job easier on the windshield of "El Capitan," Santa Fe's new all-coach stream-liner. He knows Permacel will come off clean . . . leave an even edge.



#### PRODUCTION BRIEFS

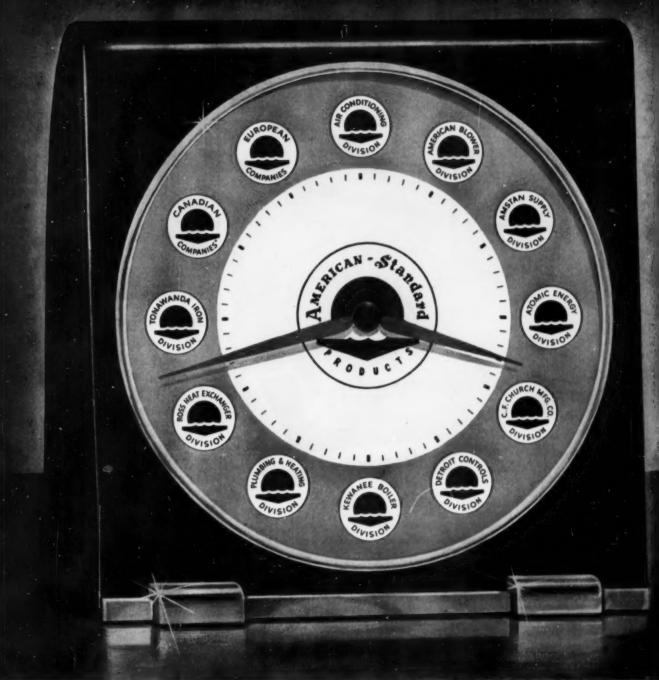


This 10,000-ton press, said to be the largest metal-forming hydraulic press in the world, has gone to work at the McDonnell Aircraft Corp. plant in St. Louis. It is used in a stretch-forming operation. Designed so it can be boosted to 20,000 tons, the press was manufactured by the Lake Erie Engineering Corp., Buffalo, N. Y.

A change for engineering: Dr. James R. Killian, Jr., president of MIT, said last week, "After a long period of status quo-itis, engineering education seems to show signs of bold experimentation and innovation. . . There is a spreading conviction that the engineering curriculum must include a larger content of basic science, less of its traditional compartmentalization, more emphasis on [the] fundamental functional aspects of engineering."

Prediction on automation: At last week's Atlanta meeting of the American Assn. for the Advancement of Science, Dr. Adam Abruzzi of Stevens Tech predicted that automation will revolutionize current standards of judging a worker's performance. He said that future judgments of performance will be based on the worker's ability to control the automation process and prevent it from breaking down.

Atomic energy operations of American Machine & Foundry Co. are expanding beyond U.S. boundaries. AMF said last week that it was setting up a new subsidiary, AMF Atomics (Canada) Ltd., with headquarters in Toronto. The new subsidiary will function pretty much as AMF Atomics does in the U.S.—as an industrial department store for atomic energy equipment,



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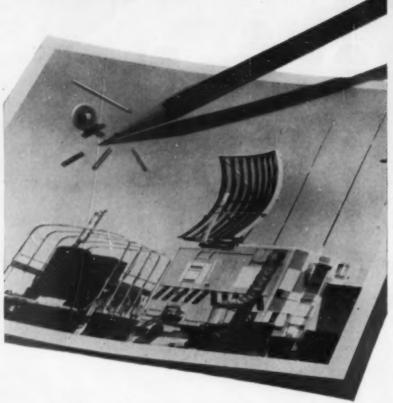
These include heating, cooling and air conditioning for homes, commercial

buildings and factories ... many types of blowers, from the smallest to the mammoth ones that circulate air through an aircraft carrier ... controls and valves for homes, research laboratories and for huge commercial installations ... plumbing fixtures for the newest hospital, hotel or dwelling ... heat exchangers for a host of industrial

processes . . . and plastic tile for bathrooms and kitchens. All of these products have one thing in common . . . quality, American-Standard quality.

Next time you need a quality product for an important job for home or industry, call on one of the divisions or companies that make up the big family of American-Standard.

## Tiny tubular parts like these do the biggest job in electronics



They emit electrons-starting a chain of events in electronic equipment that amplifies music, "paints" the picture on your TV screen, sweeps the sky with radar pulses for enemy aircraft.

Tiny tubular parts like these-called cathodes-do their vital job inside almost every kind of vacuum tube in use today. And more of these cathodes are supplied by Superior Tube Company than by any other independent producer. Here's why:

Cathodes are very small diameter, thin wall nickel alloy tubesround, elliptical, rectangular, and made to extremely close tolerances. Superior Tube combines the special engineering skills and manufacturing facilities needed to produce them in uniformly high quality and at economical prices.

When you need close-tolerance, small tubing, call on Superior Tube. Over 55 different metals—broadest range in the tubing industry. Write Superior Tube Company, 2009 Germantown Ave., Norristown, Pa.

# The big name in small tubing

Free catalog for electronic engineers and designers. Gives complete facts on cathodes, anodes, grid cups-dimensions, tolerances, chemical and physical properties.



#### **NEW PRODUCTS**



### **Durable Printing Roller**

The printing roller in the picture is said to resist abrasion three to four times better than any roller used in the printing industry today. Its manufacturer, Moreland Corp., says that the Extron roller is made of a synthetic rubber compound. And that it has been field-tested for two years without signs of wear or damage.

The company says that Extron rollers can be used either in letterpress print-ing or in the offset field. In the offset field, Moreland sees a good market, because the new roller is impervious to

The company is now equipped to produce rollers for both letterpress and offset presses.

Among the other advantages that Moreland claims for the new rollers:

• The Extron compound has three times the tensile strength of natural rubber.

· It doesn't shrink in service, because extractable liquids are minimized in its compounding.

• Its surface is smoother than rollers in use today, and it is virtually transparent, which means that cleaning is much easier.

· It does not melt up to 300F, though the company recommends that it not be used over long periods at temperatures above 150F.

The rollers will be distributed by six companies: Jomac, Inc., of New York and Philadelphia; Godfrey Roller Co., Philadelphia; Frank A. Reppenhagen, Buffalo, N. Y.; Harrigan Roller Co., Baltimore; National Roller Co., New York; Samuel Bingham Sons Mfg. Co., Chicago.

· Source: Moreland Corp., Willow Grove, Pa.

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#### The RESEARCHLIGHTS

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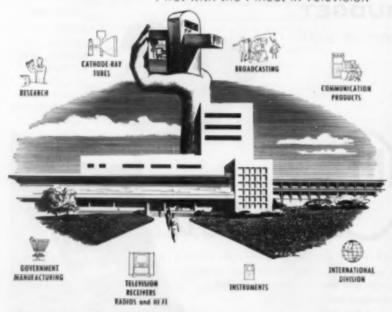
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This new check-writing device can produce checks and statements, by means of punched cards, at a speed of 300 per hour. It has been put into operation by Shell Petroleum Co., Ltd., London, and is said to be the first time that this method of converting figures into words has been used in the United Kingdom.

The system, developed in conjunction with International Business Machines Ltd., claims a new automatic method of converting figures into words on checks up to £1-million each.

The device works this way: A specially adapted machine is fed punched cards which represent the suppliers' invoices and credit notes, together with name and address cards. The machine then prints a statement for the use of the supplier, a check that shows his name and address, and the amount—in both figures and words.

 Source: Shell Petroleum Co., Ltd., St. Helen's Court, London, E.C.3, England.



#### Freight in the Basket

This "basket" freight car has been developed by the Nickel Plate Road to carry forgings for the automotive

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industry. The car can carry 24 wire containers, which are loaded and unloaded by fork-lift truck from ground level. The railroad says that this method reduces time and expense in the handling of forgings by shippers and receivers.

A forging stays in the same basket from the time it leaves the plant where it is produced until it reaches the plant of the auto producer. The Nickel Plate says that by using two fork-lift trucks, a car can be loaded with 24 baskets in 35 minutes. This time includes lifting empty baskets off the car, placing them in the plant, and setting loaded baskets back on the car. The railroad says this operation is much faster and cheaper than loading forgings into trucks or box cars because these require expensive blocking; the basket car does not.

The baskets weigh about 200 lb. cach unloaded, about 5,000 lb. loaded. Heavy canvas tarpaulins provide weather protection, and prevent forgings from jumping out of the baskets

in transit.

The Nickel Plate Road has built 54 of these basket cars. All are in use between a forging plant in Canton, Ohio, and an automobile assembly plant in Detroit.

• Source: The Nickel Plate Road, Cleveland, Ohio.

#### **NEW PRODUCTS BRIEFS**

Steel for home and church: United States Steel Homes, Inc., will display a church and a three-bedroom home at the National Assn. of Home Builders Convention, in Chicago, later this month. The house is designed to sell for \$11,500. The church is one of 15 new designs by U. S. Steel Homes; these will sell for from \$15,000 to \$35,000.

A sodium alloy slug, which is claimed to enable a car to travel 20,000 miles without an oil change, has been developed by National Research Council of Canada. The slug, manufactured by Positive Metals & Alloys, Ltd., Toronto, is supposed to prevent oxidation of the motor oil, so long as it is not exposed to air or moisture. It sells for \$3.

A calking compound, for use with aluminum doors and aluminum building materials, is the product of Overall Paint & Lead Co., Inc., Cleveland. The compound is said to resist expansion and contraction due to temperature changes. Bits of aluminum, in the form of microscopic flakes, are interlocked with rubber to make up the compound. The company says that this provides both durability and a glistening surface.

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Mr. Hobart S. Peterson Supt. of Construction & Maintenance, Ceco Steel Products Corp.

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## An End to Financial Innocence

 Second-level executives are those most likely to be ignorant of corporate finances.

Management training is beginning to fill in this gap in knowledge.

Here's a case study of how one company's men learned the mysteries of finance.

Late in 1954, Frank K. Greenwall, president of National Starch Products, Inc., ran hard up against a problem. It's one that has been bothering many managements besides Greenwall's. It wasn't that business had suddenly turned sour: In fact, National Starch was doing so well that it was just preparing to take up Clinton Foods, Inc., in a energer deal. Instead, what Greenwall found was that his second-level managers could make practically no contribution to the financial planning involved in the merger.

• Interest and Innocence—They knew little or nothing, he discovered, of the basic facts of corporate financial life. When National Starch arranged for a \$16-million loan to take over Clinton, Greenwall found some of his assistant vice-presidents asking questions that showed high interest in the deal—and high innocence, too. They came up with elementary questions on National's ability to carry the \$16-million loan that an insurance company had offered, at highly favorable rates. They wondered why National Starch couldn't collect the money through new issues of preferred stock, instead of getting a loan.

Actually, Greenwall had long felt that while his younger managers had picked up the fundamentals of production and marketing, they still lacked any financial background. However, the questions his men were asking drove the point home firmly.

So, when Clinton Foods suddenly raised its asking price, and the proposed merger was called off, Greenwall searched around for an answer to the educational problem his management was facing.

Now he thinks he has the answer: an at-home training program in finance and law. He started the program last Nov. 29. This week, as National Starch begins winding up its program, company officials agree with Greenwall but are still a little surprised at the program's success, and at its reception.

After nine evening sessions of two and a half hours each, most of the 23 executives who have been attending (they range in rank from department managers to Pres. Greenwall himself) are enthusiastic about their new grasp of the chief thing that makes business tick—money.

• One of a Pattern—Most of these 23 men have been spending a lot of money for the company in the last 10 years, but they have done so as departmental men. Few of them have ever had the epportunity to sit on top and watch the many parts of a business move together. Meantime, National Starch has been growing from a small to a medium-sized company. (Its sales of starch food fillers, resins, and adhesives rose from \$12-million in 1945, to around \$35-million in 1955.)

Along with the growth, it has switched from a closely held outfit, with about 15 stockholders, to a publicly held one with some 900 stockholders. But all the while, most of its executives have moved up through the company by switching from their technical specialties into management posts.

You can see from all this that Na-

You can see from all this that National Starch is fairly representative of hundreds of medium-sized companies. And it's precisely that fact that makes Greenwall's problem, and his solution, worth looking at.

 New Twist—It's National Starch's emphasis on finance and related law that makes it a possible leader in a new trend: away from generalized management courses toward specific economic programs.

Actually, management men in most companies are eager to learn all they can about money—how it works, and how it's used in a company. But they seldom get the chance. When they do, they make full use of it. That was made plain at last summer's Columbia University Executive Program at Arden House. There, student executives chose overwhelmingly to add two extra seminars on finance (BW—Oct.22'55,

p186). Again, at Harvard Business School, professors found that droves of middle-level executives attending advanced management programs elect that subject.

Evidently, the instructors say, these men find financial courses help them see their business as a whole.

Pres. Greenwall vetoed formal university courses because: (1) His immediate needs were for a special program in finance and financial law, not for a broad coverage of business in general and (2) he wanted a speedy infusion of knowledge into a relatively large group, not a long-term instruction of a few executives each year.

And so, he had National Starch's training director, J. D. Staunton, put together a company course. It was modeled after the American Management Assn.'s seminar-lecture programs, which are generally made up of groups of five or six men who listen to a lecture, then fire questions at the lecturers and at one another. The course was designed for personnel from the company's New York office and from its nearby plants, the nine sessions were held (whenever executives' schedules permitted) from 5:00 to 7:30 p.m. at the Lexington Hotel in New York City.

• Ówn Instructors—As teachers, National Starch brought in two men from its law firm, its own financial staff under controller W. C. Buffing, and financial consultant and company director E. D. Conway. Together they laid out a fast-paced course in law, general accounting, taxes, budgets, and external financing. Later this year, the group will get an additional course on how to analyze financial reports.

The company's lawyers started with a semi-autobiographical sketch of National Starch's development. They delved into the history of a hypothetical single proprietorship, followed its financial and legal evolution from single ownership through partnership to its final form as a publicly held corporation with a varied stock and debt structure. The same case was used to illustrate the legal side of labor and business contracts, mergers, and acquisitions.

• Essence of Planning—But the session that probably keyed the whole course was on the central core of business—cash flow. Controller Buffing passed out National Starch's own cashflow sheets, showing where the dollars come from and where they go. This was a management device—the essence of fi-



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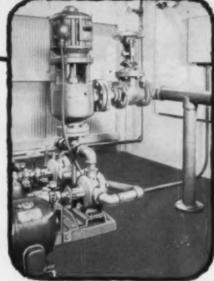
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nancial planning-which most of the executives had never seen. Unlike profit and loss statements, which abstract over-all gains and losses, the cash sheets told the students just how the company stood-and will stand-in its ability to pay its bills on time.

The executives pounced on the cash sheets, pored over the figures to see how depreciation can serve as source of funds, how changes in inventory, profits, or dividends interact to affect

One thing came clear for them immediately: Expenditures for plant expansion couldn't be met by cash generated in the company; outside dollars would be needed.

The executives learned how much, and why.

At other sessions, the executives: · Got a view of the high payout that good tax planning can give. Buffing showed the internal impact of a 52% tax rate on company cash, debt financing, and executive compensation. The class also got an introduction to the tax considerations of mergers and consolidations, and business in general.

· Heard details of the company's costing system and got an introduction to the direct costing methods (BW-Jan.15'55,p102) that the company is

considering.

· Got a lesson from financial expert Conway on external financingthe various types of equity and debt capital available to a company; their relative merits; why a company may want a mixture of stocks and debt; how a company goes searching for the cheapest capital.

· By-Product-National Starch's Secy. Sol A. Seegal found one unexpected gain. There had been no common language between the company's financial men and other executives. But the course forced accountants and finance men to explain themselves in laymen's

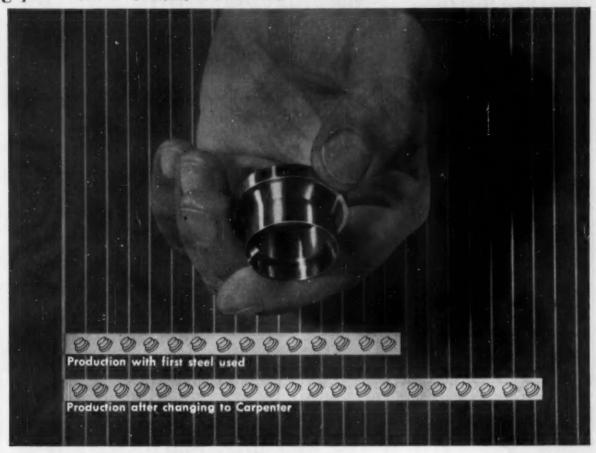
language.
"Now," Seegal says, "when I talk to one of the men in the course, I find we can understand each other. don't have to explain myself in detail

any more."

· Status Gain-National says the sessions have helped develop morale. Executives consider the financial sessions a mark of recognition that gives them status. But this has raised two problems: (1) Will the aura of status wear off if the company takes the course farther down the executive line and (2) should a policy discussion course, involving the company's own figures, be made available to men of lower rank?

Meantime, happy over the results of its fling at a management school, National Starch is planning to carry on with additional courses in human rela-

tions subjects. END



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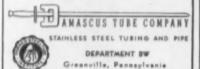
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# NEW YORK

#### THE MANAGEMENT PATTERN

## Economics and the Manager

D o BUSINESSMEN need to be economists?

This was one of the basic questions put on the academic discussion table last week at the American Economic Assn.'s annual meeting in New York (page 98).

The answers came from professional economists and business school professors. From their remarks you could get these conclu-

 More than ever before the modern businessman should have a broad educational foundation in economic science. The reason is two-fold:

(1) The growth of the economy has made it more complex than ever; and

(2) There has been a revolution over the past couple of decades in economic thinking, as it affects business decisions.

 Despite this, there has apparently been no great advance in the role of economics in university courses that prepare men for business.

• What economics does rub off on the business-minded student is "archaic, redundant, and anemic," in the words of one panelist. Too little emphasis has been placed on its operational use.

University of California's School of Business Administration and former member of Eisenhower's Council of Economic Advisers, laid down a precise outline of what is needed to fashion business managers properly educated in economics.

He agreed fully with a 1950 AEA report, which found that "only one-third of the business schools had developed advanced courses in economics especially designed for their students." He said that situation hasn't changed.

He plumped first for an undergraduate curriculum that would not teach economics in a vacuum—as separate and apart from the general courses in marketing, production, and finance. It should be woven into these studies.

Beyond that, at the graduate level, he recommended three advanced courses for "sophisticated" students. These were: (1) managerial economics to cover problems of industrial structure, forms of competition, pricing of products, and factors of production; (2) general economic fluctuations—how to analyze them, make predictions, and understand their impact on individual firms; and (3) a course that might be called Social Control of Business.

T HE surprising thing in all this is not that economists see the need for teaching more economics to business students.

What stands out is the admission that only a relatively small number of top-flight business schools even today have incorporated enough economics in their courses.

Why?

George L. Back, of Carnegie Tech, suggested that the blame falls to a large extent on economists.

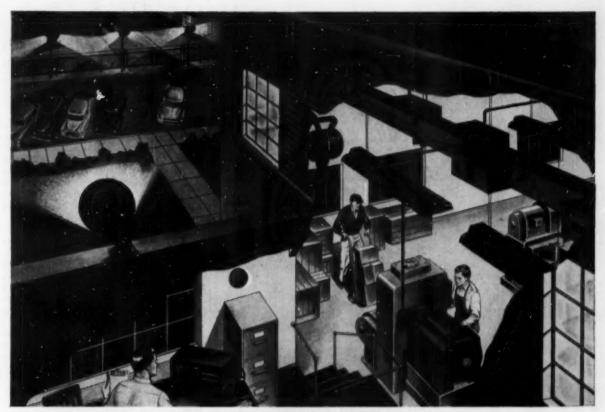
"Economists," he said, "too often shy away from the grubby business of money-making. . . ."

A speaker from the floor blamed business. Until recently, he argued, the support for economic research and theory has largely come from the government, so economists naturally considered primarily the broader, social aspects that arise from the interplay of businesses as a whole-macro-economics. The lack of adequate theories about economics within the firm-micro-economics-can be laid, in this view, to management's lackadaisical support.

That may change, because there's not much doubt business managers themselves are beginning to see a real need for a better understanding of the facts and theories (BW—Oct.22'55,p186).

More than ever before, business decisions today aren't made for short-run goals. Long-range planning—hence, a need for executives to understand how the economy works—has become almost a corporate necessity.

Today's executive is fast realizing there are no immutable copybook rules of first-year economics to rely on. He is adjusting to becoming a part-time student of economics.



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## Healthy Bosses

University of Pittsburgh's Health Center will probe causes of most common "executive diseases."

Business is cracking down on key men who don't watch their health. Short of good executive material already and facing even more drastic shortages as the economy expands faster than managemer t manpower can be developed, most companies of size today require top people to have a regular check-up (BW—Sep.11'54,p101).

The trouble with this procedure, most managements feel, is that it is entirely diagnostic, not preventative. It's worthwhile, of course, to catch a disease before it reaches the debilitation point. But, doctors point out, it would be a lot better if medical science could research the causes of the most common "executive diseases."

• Pittsburgh Special—Last week, the University of Pittsburgh's Health Center announced a program that aims to do just that. By giving thorough and regular examinations, at company cost, to officials of industry in the Pittsburgh area, Pitt hopes to (1) diagnose ailments that might put these men out of action; (2) compile data on the disease trends among managers; and (3) investigate the causes of prevalent ailments.

Pitt's program has some special objectives and advantages. For one thing, its examinations are designed to detect diseases that are notoriously silent and insidious at the onset. Second, Pitt is joining the trend to investigating executives' emotional disturbances, at the same time it runs its physical exams. Effects of work stresses, leisure habits, and emotional tensions are typical of the things Pitt doctors will probe.

This concern with emotions is similar to the intent of a conference of the Society for Applied Anthropology on the mental stresses employees encounter in automated factories, held this week at Yale. And, earlier this year, construction of a rest and rehabilitation spa for executives was begun at Aspen, Colo.—the Rocky Mountain resort brainchild of Walter Paepcke, chairman of Container Corp. of America.

Data—Pitt's program has added advantages in that the businessmen it studies will be drawn from the wide cross-section of industry found in the Pittsburgh area. Thus, the "sample" will be at once fairly typical and stable. Records kept on the same men over the years will aid continuity of study much as the armed forces' health records aided government doctors in planning military health programs.

By Feb. 1, Pitt hopes to have its program rolling in new facilities in the university's rapidly growing medical school. Dr. Robert Moore, vice-chancellor and head of the medical school, expects up to 300 executives will come in for check-ups the first year, with examinations taking from a couple of days to, conceivably, a couple of weeks in special cases.

• Training Ground-Pitt will make no attempt to evaluate executives for promotion nor determine aptitude for specific duties. According to Dr. Adolph G. Kammer, chairman of Pitt's department of occupational health, "Industry will be paying for something on which it never gets a report and that's unique." Companies pick the men they want to send, pay for the check-ups at a rate sufficient for Pitt

to break even.

The medical school isn't concerned with profits from the program, because its main objective is to train doctors for industry. The executive health program merely creates excellent supplementary research opportunities for that purpose. Eventually, it may prove unique in its close relation with education and research, but that will take time. Right now, Dr. Moore says, "it should be viewed as an extension of the teaching hospital into a needed area of education, research, and service."

• Confidential—Student doctors will assist Pitt's regular physicians in the more routine parts of the examinations. Results will be sent to the examinee and his family doctor, but not to his company. All the boss can get is an annual look at Pitt's general findings—and, of course, more insurance that managers, whose experience makes them specially valuable, will be less vulnerable to the

hazards of aging and strain.

One proof that this insurance pays off can be made out of data developed during U.S. Rubber Co.'s extensive health watch-dogging program. Abnormal weight conditions among executives were cut from 19.8% of the hundreds of cases checked in 1949 to 7.4% by 1953. The percentage of managers with abnormal electrocardiograms dropped from 18.5 to 8.4; uncorrected vision and high blood pressure incidences were cut right in half during the same four-year period.

Pitt is only one of the universities that have been studying and evaluating executive health levels. Harvard, University of Chicago, University of Pennsylvania, University of Michigan, and other schools—as well as hospitals and clinics—have been probing into the bosses' occupational illnesses. But in an industrial area such as that around Pittsburgh, where good management material is at a premium, the establishment of Pitt's executive health program scems logical.



## lots of wing room needed in a "B hive" like this

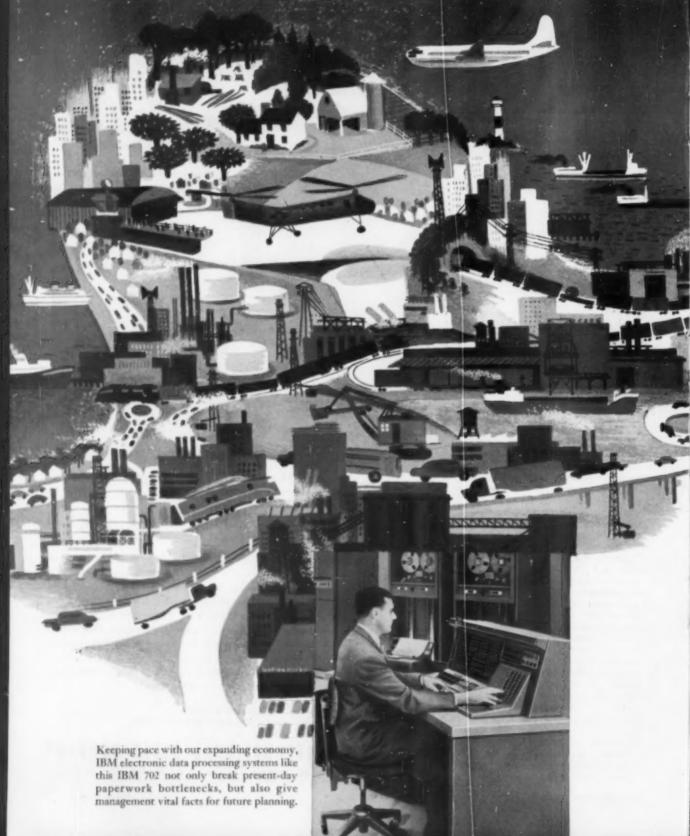
OVER 81,000 SQUARE FEET, in fact, is the amount of unobstructed floor space required — to accommodate the huge B-47 jet bombers housed in this giant hangar. To provide this vast wide-open area called for more than 2,100 tons of structural steel, much of it specially fabricated to assure adequate supporting strength. Despite this extraheavy tonnage, International Service spanned the distance to keep construction on schedule . . . supplying all structural steel and all hangar doors as well. Write for your copy of the International Steel Facilities Guide.



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## INTERNATIONAL STEEL COMPANY

## IBM PROGRESS REPORT



## FOR BUSINESS



## TODAY, IBM IS SOLVING MORE PROBLEMS FOR MORE BUSINESSES THAN EVER BEFORE!

Saving more time in processing more business data for more businesses has been the keynote of IBM progress for more than 41 years. And this progress was never more marked than during the past year.

In typical 1955 IBM installations: a chemical company reduced the time for producing monthly cost reports from 2,400 hours to 10 hours; a leading aircraft company now creates a master production schedule that used to take four weeks to prepare, in 24 hours, at a cost saving of 40%; another manufacturer is doing a payroll for 8,700 employees in 3½ hours!

To speed similar efficiencies for more businesses, more than 1,125 IBM electronic data processing systems have been installed or put into production during 1955. Of these, 185 medium-sized IBM 650's—the "electronic workhorse," and 32 giant 700 series machines are at work for a wide range of businesses. Every working day, one or more of these electronic machines roll off the production line!

In addition, 285 IBM Cardatypes® and 110 "1000-Cards-per-minute" Electronic Sorters (both just announced last January) have been delivered. And more than 1,625 growing businesses have started on the road to punched card savings by installing IBM data processing systems.

IBM ... first to put electronics on a

down-to-earth basis for business, is also first to offer industry and business a complete line of data processing equipment to meet its diverse needs. From the giant IBM 705 to smaller punched card data processing systems, IBM can fit your needs exactly. For the plain facts about data processing for any business—large or small—contact your local IBM representative.

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Call your National Stationer for more facts.

Be sure the girls in your office enter the 1956 Miss Eye-Ease Selection. Eleven awards up to \$1,700. Your National Stationer's salesman has entry forms, or send coupon below.

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Company	 						* * !		 		 		6.16

#### MANAGEMENT BRIEFS

Van Norman Industries Inc. (BW-Nov.5'55,p148), once confined to machine tool making (1954 sales: \$17-million), but which last year diversified into electronics and carbide cutting tools, has now picked up H. W. Butterworth & Sons Inc., \$4-million-a-year producer of textile machinery. Van Norman expects total sales of \$35-million in '56.

In one form or another American business shelled out around \$80-million in aid to education during fiscal '54.'55 This is a little less than 16% of the \$507-million total that colleges took in as gifts or grants.

After a temporary delay in negotiations last month, New York financier F. W. Richmond has picked up the assets of Pressed Metals of America. Inc. (1954 sales: \$8-million), producer of automotive suspension parts. The package sold for around \$2.7-million plus the assumption of a \$500,000 liability by the new owners.

During their seasonal slack period Campbell Sash Works and Calex Corp., Campbell, Ohio, related aluminum fabricating companies, next week will foot the \$15,000 bill, send their 45 employees to a one-week vacation in Florida. The four brothers who operate the companies say, "We had a good year. We want to show our appreciation."

Stockholders of both companies have approved the merger that will turn Mohawk Carpet Mills, Inc., and Alexander Smith, Inc., into Mohasco Industries, Inc. If one more hurdle—government approval of the merger—is cleared, Mohasco will be the largest single outfit in the carpet industry.

To educate Cleveland executives, yet keep them in contact with their jobs, Case Institute of Technology this spring will spread its eight week Management Development Program over a 23-week period. Participants will start with three weeks at Case, go back to their jobs for three weeks, then alternate three weeks on the job and one at Case till the course is completed.

Exchange of stock deal has brought Square D Co., Detroit, and Electric Controller & Mfg. Co., Cleveland, together. This adds Square D's \$65-million-a-year production of electric controls to Electric Controller's \$10-million-a-year business in heavy industrial controls.

# Scandinavia increases steam capacity, cuts costs burning coal the modern way

With its old power equipment overloaded by an ever-increasing demand for steam, Scandinavia Belting Co., Charlotte, N.C., took stock of its power situation. Boiler room efficiency was low and maintenance excessive; pressure fluctuated and labor costs had become a problem. Deciding to modernize, Scandinavia instituted a survey of all available fuels. On the basis of cost, coal was chosen. Today, after modernization, Scandinavia's power plant has increased steam capacity 150%. reduced fuel costs 15% and cut labor costs 70%. Increased efficiency and automatic operation have reduced the work force and assured a dependable steam supply at steady pressure with ample reserve for load growth. In addition, the cleanliness of the new plant has been an important factor in raising the morale of the employees.

### facts you should know about coal

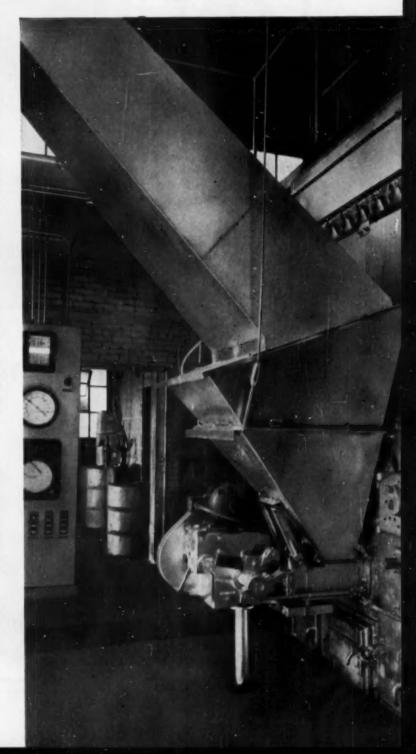
In most industrial areas, bituminous coal is the lowest-cost fuel available • Up-to-date coal burning equipment can give you 10% to 40% more steam per dollar • Automatic coal and ash handling systems can cut your labor cost to a minimum • Coal is the safest fuel to store and use • No smoke or dust problems when coal is burned with modern equipment • Between America's vast coal reserves and mechanized coal production methods, you can count on coal being plentiful and its price remaining stable.

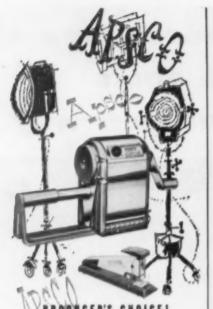
#### Consult an engineering firm

Designing and building hundreds of heating and power installations a year, qualified engineering firms can bring you the latest knowledge of fuel costs and equipment. If you are planning the construction of new heating or power facilities, or the remodeling of an existing installation, one of these concerns will work closely with your own engineering department to effect substantial savings by increased efficiency and fuel economy through the years.

For further information or additional case histories showing how other plants have saved money burning coal, write to the address below.

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See Clues on Page 122

#### FINANCE



FIRE PATROL MEMBERS, paid by fire insurance companies, clean up after salvaging property in a plant blaze in New York. Only eight other cities still have groups as . . .

## Fire Patrol Bows Out



OLD-TIME patrol member stands beside a piece of equipment-vintage 1884.

Fighting fire in a private interestable the fire laddies above are doing—is an old, and practically unknown, commercial practice. There are still nine of these fire-fighting companies, maintained by fire insurance companies. But the number is dwindling. Just this week St. Louis' salvage corps gave up chasing fires after 82 years of property protection in the downtown area.

• The Stake—Fire insurance companies, naturally, have a direct stake in cutting down fire losses. Beginning back in the early 19th Century individual companies maintained their own fire patrols. Some of them looked out solely for their own interests. In those days an insured premise bore a metal plaque with the name of the insurance company on it. If an insurance company fire patrol chased after a fire and then discovered the company name on the "fire mark" was not the one that paid its keep, it lett the blaze alone. But later the patrols became better organized and were

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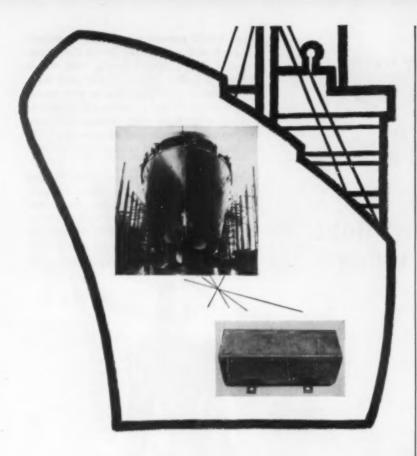
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ment let you match 300 Utility power and stamina to your job exactly. For free folder, write International Harvester Co., Dept. BW-1, P. O. Box 7333, Chicago 80, Ill.

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## Man-made barnacles save the ship

A few Federated magnesium anodes protect ship hulls against corrosion. Installed in ballast tanks, they descale tank interiors and prevent further scale formation. Tank cleaning time is reduced. Cargo contomination is cut to a minimum.

Federated's Corrosion Advisory Service, available to shipbuilders and ship owners who wish to install protective zinc or magnesium anode systems, is typical of the research, development and service facilities by which Federated guides users to most effective use of non-ferrous metals.

Cathodic protection is also valuable for underground pipelines or wherever underground or marine conditions contribute to the destruction of valuable metal structures. Consult with Federated engineers at "Headquarters for Non-Ferrous Metals."

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Main objective of these fire patrols property protection—of course, differed from that of volunteer and city firemen. The municipal fire fighters were intent on saving human lives and putting the blaze out as fast as possible. Their equipment was primitive and often when they got through dousing a fire, damage to property from water was greater than that caused by fire.

• Total Loss—A famous fire in New York City is a good example of the limitations of early fire fighting techniques. On Sept. 22, 1836 the volunteers of Engine Co. 26 responded to the fire horn with real zeal. The Bowery Theater was aflame and they wanted desperately to save the creaky, wooden structure. Many of the sportiest volunteer firemen's annual balls had been staged there. But despite the firemen's efforts, the theater was devastated in 30 minutes.

Though they failed to save the building, firemen battling the Bowery blaze made fire-fighting history. For the first time on record, the volunteers used wet mats and blankets to keep the fire from spreading to adjacent buildings and property.

• The Beginning—The first really wellorganized insurance company fire patrol
was formed three years after the Bowery
fire when the Assn. of Fire Insurance
Companies hired 40 men—at \$250 a
year—to patrol the mercantile district
of New York City at night. And the
patrol used the "wet blanket" technique
as its prime means of protecting property. Five years later special mats and
covers were bought for the patrol.

The New York fire patrol grew with the city. Fire patrol headquarters were established on Dutch St. near Fulton. And when the state legislature chartered the Board of Fire Underwriters in 1867, every fire insurance company was required to pay a percentage of its premium income to support the patrol.

Meanwhile, fire patrols began to spring up in other cities. The turn of the century saw the heyday of the fire patrol. By 1917 there were patrols in at least 21 cities. Some had more than one station. And the patrols answered every box alarm—even protecting property that wasn't insured.

• New Techniques—The wet blanket technique remained one of the chief weapons of the fire patrols, but others were added. Chemical extinguishers came into use as well as other modern fire-fighting methods. The fire patrol was most effective in multi-story buildings, working on the floor below the fire to protect property there from water and other damage.

At the same time municipal fire departments were improving their firefighting techniques—and broadening

## New Issues-1955

#### Purchased and Offered by Halsey, Stuart & Co. Inc. alone or with associates\*

1 (1)	chased and Offered by Ha	iscy, Stuart	& Co. INC. alone of with associate	23.
Amount of Issue	Tax-Exempt	Amount of Issue	Corporate	Underwriting Interest
	ALLEGHENY COUNTY INST. DIST., PA. 216% Bonds, Due 1916-85 BIRMINGHAM, ALA.	\$280,000,000	THE BALTIMORE AND OHIO RAILROAD COMPANY† First Cons Mtge 3/8 Bonds due 1970, 4% Bonds due 1980, 4/4 Bonds due 1995	\$ 7,588,000
	Var. Rates Bonds, Due 1957-84 BOSTON, MASS. Var. Rates Notes, Due 1955-56	12,000,000	CENTRAL MAINE POWER COMPANY First & Gen Mige Bonds, Series V 31/8 due 1985	3,650,000
	(3 issues) & Bonds, Due 1956-75 CALIFORNIA, STATE OF	8,400,000	CHESAPEAKE AND OHIO RAILWAY EQUIPMENT	6,600,000
	Var. Rates, Voterans' Bonds, Due 1957-76 CAMBRIDGE, MASS.	7,500,000	TRUST OF 1955 3% Certificates, Due 1956-76	
	1.90% Boads, Dec 1956-75 CHICAGO BOARD OF EDUCATION, ILL.	40.000.000	RAILROAD EQUIPMENT TRUST, SERIES UU 3%% Certificates, Due 1936-71	3,300,000
	21/4% Bonds, Due 1958-75 CHICAGO, ILL.†		THE COLUMBIA GAS SYSTEM, INC. 31/6% Debentures, Series E Due 1980	7,350,000
	11/2% & 2% Bonds, Due 1956-75 CHICAGO REGIONAL PORT DISTRICT!		CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.† First & Ref Mtge Bonds 3 % % Series K, due 1985.	6,975,000
	4% Rev. Bonds, Ser. of 1955, Dec 1995 COOK COUNTY, ILL.†		DALLAS POWER & LIGHT COMPANY 31/4 % Sinking Fund Debentures, due 1980	5,500,000
	21/2% Expressway Bonds, Due 1936-75 DADE COUNTY, FLA.†	60,000,000	THE DETROIT EDISON COMPANY† Gen & Ref Mtge Bonds, Ser. O, 31/4 % Due 1980 , , ,	6,000,000
11,777,000	31/6% Port Authority Rev. Bonds. Due 1979 DELAWARE, STATE OF†	30,000,000	DETROIT STEEL CORPORATION First Mtge SF 4%% Bonds, due 1970	3,850,000
5,400,000	1.90% & 2.20% Bonds, Due 1916-73 (2 issues) DENVER, COLO., CITY AND COUNTY	25,000,000	GULF, MOBILE AND OHIO RAILROAD COMPANY First & Ref Mtge 31/6 % Bonds, Ser. G, Due 1980	5,300,000
8,000,000	OF† 5% & 2% Bonds, Due 1963-72 DUVAL COUNTY, FLA.†	10,000,000	KANSAS GAS AND ELECTRIC COMPANY First Mige Bonds, 3%% Series due 1985	2,750,000
5,025,000	Var. Rates Certificates, Due 1956-70 FAIRFIELD, CONN.	5,550,000	MISSOURI PACIFIC RAILROAD EQUIPMENT TRUSTS SERIES A & C, 31/4 % & 31/2 % Certificates, Due 1956-71 .	4,125,000
14,500,000	2.10% Bonds, Due 1956-75 GEORGIA RURAL ROADS AUTHORITY † 216% & 2.70% Rev. Bonds, Due 1957-71	35,000,000	MONTREAL, THE CITY OF (CANADA)† Var. Rates, U. S. Debentures, Due 1936-74	2,957,500
7,500,000	HAWAII, TERRITORY OF† 255% Bonds, Due 1958-75		NATIONAL CONTAINER CORPORATION† 4½ Fifteen Yr SF Debentures, Series due 1970	3,500,000
4,000,000	HOLYOKE, MASS. 2.20% Bonds, Dea 1956-85	30,000,000	NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY 36 Year 31/4 % Debentures, Due 1991	13,000,000
12,490,000	HOUSTON, TEX.† 2½% Bonds, Due 1916-80	25,000,000	NEW JERSEY BELL TELEPHONE COMPANY	6,700,000
4,766,000	JOLIET SCHOOL DISTRICT No. 86, ILL. Var. Rates Bonds, Doe 1916-74	7,500,000	40 Year 31/6% Debentures, Due 1995 NEW YORK CENTRAL RAILROAD EQUIPMENT	2,250,000
	LOS ANGELES SCHOOL DISTRICTS, CAL. † 21/2% Bonds, Due 1936-80 (5 issues)	4,080,000	TRUST OF 1955 3% % Certificates, Due 1956-70 NEW YORK, CHICAGO AND ST. LOUIS RAILROAD	
	LOUISVILLE, KY. 2.40% & 2½% Rev. Bonds, Due 1960-84	7,980,000	EQUIPMENT TRUST OF 1955 2% % Cafe, Due 1955-70 . NORTHERN PACIFIC RAILWAY EQUIPMENT TRUST	3,480,000
	METROPOLITAN WATER DISTRICT OF SO. CAL. † 21/4 % Bossis. Doe 1956-80	10,000,000	OF 1955, 2nd & 3rd Series, 3% Ctfs, Due 1956-70 PACIFIC POWER & LIGHT COMPANY	2,880,000
	MIAMI, FLA.† Var. Rates Bonds, Due 1956-81 (2 issues)	19,500,000	First Mtge Bonds, 3%% Series due 1985	5,500,000
	MIDDLESEX COUNTY SEWERAGE AUTH., N.J. † Var. Rates Rev. Bonds, Due 1962-99	30,000,000	First Mtge Bonds, Series B 4% Due 1980 SOUTHERN BELL TELEPHONE AND TELEGRAPH	2,400,000
	MODESTO SCHOOL DISTRICTS, CAL.† Var. Rates Bonds, Due 1956-80	20,000,000	COMPANY 40 Year 31/4 % Debentures, Due 1995 THE SOUTHERN NEW ENGLAND TELEPHONE	2,650,000
	NEW MEXICO, STATE OF 2% & 2½% Rev. Boods, Due 1936-65 NEW YORK SCHOOL DISTRICTS		COMPANY 34 Year 31/4 % Debentures, Due 1989 SOUTHERN PACIFIC COMPANY EQUIPMENT	4,350,000
	Var. Rates Bonds, Due 1955-85 (25 issues) OHIO, STATE OF†		TRUSTS, SER. QQ & RR, 21/4 % & 31/4 % Ctfs, Due 1956-70 TENNESSEE GAS TRANSMISSION COMPANY!	6,840,000
	Var. Rates, Series B. Res. Bonds, Due 1936-72 ORLEANS PARISH SCHOOL BOARD, LA.	7 3,000,000	First Mortgage Pipe Line Bonds, 3% % Ser. due 1976 & 4% Debentures due 1975	3,683,000
	Var. Rates Bonds, Due 1961-95 PORT OF NEW YORK AUTHORITY!	8,500,000	WORCESTER COUNTY ELECTRIC COMPANY First Muge Bonds, Ser. D, 3%% due 1985	5,200,000
	21/4% Consol Rev. Bonds, 4th Series, Due 1985 PRINCE GEORGE'S COUNTY, BD. OF	15,222,000	ADDITIONAL EQUIPMENT TRUST CERTIFICATES	
	EDUC., MD.Var. Rates Bonds, Due 1996-75 ST. JOHNS COUNTY, FLA.	Descriptive circulars	or prospectuses, where available, and current qualations will be supplie	
	Var. Rates G.O. & Rev. Bonds. Due 1957-84 ST. PETERSBURG, FLA.†	*To December 16, 19	securities upon request.  15	issues were headed.
8,400,000	31/2% Rev. Certificates, Due 1956-77 SAN DIEGO COUNTY, CAL.		red alone, by Halsey, Shart & Co. Inc.	1
4,000,000	2% & 21/4% Bonds, Due 1996-75 SHREVEPORT, LA.		-End Bond Survey and Tax Chart of 1955 bond marker and outlook for	THE ENGLIST
8,267,000	Var. Rates Rev. Bonds, Due 1955-74 TACOMA SCHOOL DISTRICT No. 10;	1956, and compa	rison chare based upon individual Federal	End Towns
4 400 000	WASH, Var. Rates Bonds, Day 1957-75	tax rates now in	effect—to help you determine the value	ney / /

tax rates now in effect-to help you determine the value of tax exemption in your income bracket. Write without obligation for folders BJ-56.

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their objectives. They learned to put out fires without causing so much water damage. Chemical means of extinguishing fires became widespread after World War I. And the fire fighting schools set up by municipalities put emphasis on protecting property as well as human lives.

• Need Diminishes—The result was that as municipal fire companies became more adept at combatting fire, the fire patrols found themselves with less to do. And the fire insurance companies soon realized that the municipalities could—and should—do the job that their patrols had been doing. So after 1917 the number of fire patrols began to dwindle.

At the end of last year, the number of cities having fire patrols stood at 10. But with St. Louis dropping, there'll be only nine. Biggest patrol is in New York City, which is closing one station, but will continue three in operation. Other cities with patrols are Kansas

City, Cincinnati, Chicago, Baltimore, Philadelphia, Boston, Worcester, and Albany.

• St. Louis Corps—The St. Louis fire patrol—or salvage corps as it is called there—is being abandoned after 82 years of operation. Its activities have been fairly typical of patrols around the country. It answered all box alarms in the downtown area of the city. Last year it responded to the alarm bell 3,290 times. And in a fire just a few months ago, the corps was given credit for saving over 100,000 Thanksgiving turkeys from a premature roasting by covering refrigeration cases while municipal firemen fought to contain the blaze.

The city in 1938 had three salvage corps stations. Cost-cutting was not the primary reason for eliminating the stations, according to the National Board of Fire Underwriters. "The fire patrols more than pay for themselves over the but now the cities themselves are expected to do the work, so naturally the fire insurance companies feel they should be set."

• Integration—In other cities where the fire patrol has been abandoned, the municipal government has taken over the fire patrol's equipment (sold to them for \$1 by the local underwriters) and hired some of the fire patrol members. When the Memphis and San Francisco patrols were taken over by municipal governments, they continued to operate as separate units.

to operate as separate units.

But St. Louis civic officials refused to acquire its local salvage corps even for \$1. The city didn't want to assume the cost—about \$100,000 a year—of maintaining the corps. The St. Louis Salvage Corps Board has attacked Mayor Raymond R. Tucker for turning down the offer, contending that "... this work should be part of the city's

protection." But St. Louis may be the first city where a fire patrol has passed completely out of existence.

Some observers have claimed that the fire patrols should be retained on the old basis, and that fire losses are sure to climb if they're done away with or absorbed by city fire fighting forces. But the National Board of Fire Underwriters says, in actual practice, no city has shown a marked rise in property losses following the demise of its fire patrol. And it doesn't expect losses to shoot up when future patrols are disbanded.

· New York Operation-Eventually, New York will be the only city to have a fire patrol. The New York operation is the biggest in the country now, costing the New York Board of Fire Underwriters over \$1-million a year. Though it is closing a station in the Bronx in February, the board says the other three stations are permanent. Two are located in Manhattan, serving the downtown and midtown areas. The third station covers downtown Brooklyn.

Maintaining fire patrol operations in New York makes sense because of the high concentration of multi-story buildings. When these structures go up in smoke, a fire patrol can do a lot to cut down property damage while firemen fight to bring the blaze under control. There aren't too many of these buildings in the Bronx, which explains why that station is being closed.

#### FINANCE BRIEFS

Research pays off-in stock. Haloid Co. will pay over 55,000 shares of its common stock to Battelle Memorial Institute for exclusive rights to Battelle's xerography patents. Besides 55,000 shares to be paid by 1958, Haloid must pay royalties on its xerography sales in stock and cash.

Patrick B. McGinnis, president of the New York, New Haven & Hartford RR, may be right about the road's 1955 earnings, but not by much. Mc-Ginnis predicted earnings between \$10-million and \$10.5-million (BW-Dec.31'55,p73), but November earnings totaled only \$867,065, about \$137,000 less than November, 1954. The 11-month total is \$9.3-million. However, holiday travel should make McGinnis' prediction stand up.

Transamerica Corp. is moving into New Mexico for the first time. Bank of New Mexico directors have approved a move by the fast-expanding bank holding company (BW-Oct.8'55,p56) to acquire a controlling stock interest for \$1.4-million. Transamerica will hold 23,000 of a total 45,000 shares outstanding.



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## In Washington

#### Small Operator Gets a Break Under New Federal Loan Plan

The Small Business Administration is making it easier for the small businessman to borrow money.

Under a new program announced last week, SBA will authorize loans for a maximum amount of \$15,000 to be repaid five years at not more than 6% interest. Collateral requirements are easier than before; the merchant who rents his premises can use fixtures, inventories, accounts receivable, or even personal property.

The agency requires that the borrower's bank participate in every loan at least to the extent of 25%. Thus, the practical limit under the program for one loan to one small operator becomes \$20,000. SBA Administrator Wendell B. Barnes expects most loans to fall between \$8,000 and \$10,000.

According to Barnes, one of the more attractive features of SBA's new loan program is the five-year repayment term. "This should cover a large percentage of cases where very small business needs credit and can get it now from banks only on 90-day and six-month terms," he says.

#### ICC Orders Freight Rate Cut To Complete Equalizing Plan

The Interstate Commerce Commission last week told railroads to cut rates on shipments of manufactured goods to and from 12 Western states starting June 1. Commodity rates on bulk shipments will remain unchanged. Savings to shippers are estimated at around \$10-million a year.

ICC's action is the final step in an over-all plan started by the commission 16 years ago to equalize rates of manufactured goods to all sections of the country. Regional rates still will differ, but not so much as before. Rate cuts will range between 16.4% and 29%, with rates equalized for traffic flowing in both directions.

In another move last week, the railroads asked ICC for a 7% across-the-board hike in freight rates, effective Feb. 25. The increase is expected to bring in about \$600-million a year more in freight revenue.

## Democrats' Theme for '56:

Business in Government

Democrats wasted no time this week in getting their investigative theme for 1956 established—"business control of the Eisenhower Administration."

House Democratic Leader John McCormack of Massachusetts enunciated the general idea as the new session of Congress assembled. From several sides there came quick evidence that the theme will be hammered hard. Chmn. Carl Vinson (D-Ga.) of the House Armed Services Committee is turning loose a subcommittee to conduct public hearings on profits of airplane manufacturers under military contracts. Rep. F. Edward Hebert (D-La.) will run the show, with testimony tentatively scheduled to begin in a week or so.

Representatives of every major company holding military aircraft contracts will be summoned. But the real targets are Defense Secy. Charles E. Wilson and his Pentagon high command. The contracts to be examined were negotiated, rather than let through competitive bidding, a practice Vinson has denounced.

McCormack didn't mention it specifically, but he has his eyes on another situation—the controversial SAGE (semi-automatic ground environment) system that Defense Dept. has ordered built by private communications companies (BW—Oct.29'55,p30). McCormack has labeled the project a giveaway—"one of the most amazing transactions ever attempted in the history of our government."

Two investigators who were busy during the past year elaborating on familiar Democratic themes will continue their efforts—Rep. Emanuel Celler (D-N.Y.) on the influence of dollar-a-year men in the administration and Rep. Earl Chudoff (D-Pa.) on Eisenhower power policy.

## TVA Warns of Power Shortage In Drive for New Steam Plants

Tennessee Valley Authority opened a new drive for additional steam plants as Congress convened. In its annual report, TVA warned there will be a power shortage of 500,000-kw. in the area it serves by 1958 unless new steam plant construction is started right away.

The power authority did not suggest how new plants should be financed. But it did remind the President and Congress that a plan is pending to allow TVA to issue revenue bonds. The main point TVA was trying to put across was the area faces a power deficit in two years, despite the fact that Memphis will build its own plant to take up the slack left by the cancellation of the 600,000-kw. Dixon-Yates plant.

Before the Eisenhower Administration evolved the illfated Dixon-Yates plan to meet the area's future power needs, TVA unsuccessfully tried to get Congress to vote money for a 400,000-kw. plant at Fulton, Tenn. Washington observers feel TVA's latest report will revive the Fulton plan.

## AEC Is Ready to License

#### **Nuclear Reactor Operators**

Atomic Energy Commission has issued its first regulation under the 1954 Atomic Energy Act. The rule, effective Feb. 2, covers licensing of individuals who qualify as nuclear reactor operators.

Under the regulation, licenses will be required for persons who have authority and responsibility for deciding how and when a nuclear facility is to be manned and operated. In other words, a license will be issued to a foreman, rather than to his aides.



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Worthington Corp.
York Corp.

Source: Publishers Information Bureau Analysts

## INTERNATIONAL OUTLOOK

BUSINESS WEEK JAN. 7, 1956



There's a powerful new force behind Soviet foreign policy—the ambition of Nikita Khrushchev, burly boss of the Communist Party.

Khrushchev aims to ride to the top in Russia on victories won from the West—won by his own brand of diplomatic pressure and blackmail.

By playing on the colonial issue, holding out economic bait, expanding Cominform activities, and rattling the H-bomb, Khrushchev figures he can undermine Western influence in South Asia, the Middle East, and Africa.

All this and more emerges from the speech Khrushchev delivered last week to a special session of the Supreme Soviet.

He and not Marshal Bulganin set the policy line in world affairs. (Molotov didn't say a word, seems on his way out.) And Khrushchev talked as if he already had the West on the ropes.

Anything that stands in the way of Communism, he said, "we shall sweep out of our way." Western resistance to the "peaceful" expansion of Communism amounts to aggression, and could lead to H-bomb war.

As for disarmament, that must be on Soviet terms. Indeed, Khrushchev rejected Pres. Eisenhower's aerial inspection plan so bluntly that progress on this scheme is hardly possible now.

To drive his point home, Khrushchev gave Pakistan a blunt warning: Get out of the Baghdad Pact or expect trouble.

The trouble could come from Afghanistan, which Moscow expects to control soon, and through internal subversion.

Khrushchev's game is clear enough. He plans to destroy the Western defense system in the Middle East by knocking off first Pakistan, then Iran.

Western capitals now are asking: How far will Khrushchev go in pushing this policy? Does he think that Soviet development of the H-bomb has so tied our hands that he can win his game by pressure on Pakistan, Iran, and Indo-China and, if necessary, by showdowns in Formosa and Berlin?

Washington and London aren't sure of the answer. But they are clear about one thing: Any sign of Western weakness will only encourage the power-hungry Communist boss.

What's happening inside Russia is as much part of the story as the Western weakness Khrushchev is probing.

You can't forget two things: (1) Power relations in the Kremlin have been fluid ever since Stalin died; and (2) the Bulganin-Khrushchev regime is now launching another stupendous five-year plan. It's doing it from such a shaky agricultural base that internal strains are bound to be serious.

In a situation like this, easy successes abroad would help Khrushchev in his drive for supreme power. At the very least, they would come in handy in covering up his failure to solve the farm problem.

It's now clear that one thing contributing to Malenkov's downfall was the reverse Moscow suffered in Iran during 1953; at that time Mossadegh was tossed out and the Soviet stooges who backed him were liquidated. Khrushchev clearly wants to deliver the goods where Malenkov and Molotov failed.

## INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK JAN. 7, 1956 "Another prosperous year for Britain" is the New Year forecast from London. But the seers agree: 1955's inflation will work further into the economy, break out with further rises in wages, costs, prices.

The Manchester Guardian expects industrial production to rise 4% this year (it was 4.75% last year); national income, 3% (compared to 3.5%); exports, 4% (6%). Consumer spending will rise 3%, a shade less than in 1955. Business' capital outlay will jump a resounding 10%, two points above 1955's surge.

The idea that inflation will continue stems from the fact that business spending, rather than the consumer spree, is the real inflationary culprit. And it doesn't respond quickly to credit tightening.

Indeed, some observers talk of an impending revolt—by business—against tight money. Businessmen insist that industry can't expand, cut costs, sell more exports without more bank credit.

Nonetheless, London believes that tight money will last through most of the year. But the bank rate probably won't be raised again.

There are some hopeful omens for the British balance of payments.

One London forecast is that the nation will run just in the black through
1956. (But convertibility plans won't be revived, at least not until autumn.)

True, the sterling area's gold and dollar reserves dropped a sickening \$163-million last month. But look behind the figures: The annual installment on the U. S. and Canadian loans—\$176-million—more than accounts for the drop. If you exclude debt service, U. S. aid, and the like, there was a surplus of \$29-million—compared to heavy deficits earlier in 1955.

The tanks-to-Egypt scandal may defiate the Eden government's prestige, already a bit wobbly (BW—Dec.24'55,p69).

It's a big political row. Apparently scrapped wartime tanks were exported to Belgium, reconditioned, and shipped to the Middle East. And there's the intriguing mystery of the de-gunned Sherman tanks, used as tractors in the ill-fated East African peanut scheme, then sold to scrap merchants, and now rumored to be rebuilt as war vehicles.

Labor Party leader Hugh Gaitskell is determined to embarrass the Tories with the tanks, and has demanded the recall of Parliament before Eden's Washington visit. Eden must handle the issue with kid gloves.

In India this week business confidence hit a new low. The Bombay stock market sold off sharply.

News reaching Bombay from New Delhi tells the story: The Nehru government is considering (1) an annual capital levy; (2) a salary ceiling of \$5,000; and (3) nationalization of insurance companies.

The Indian government already has closed down the cotton exchange—because of "speculation." Bombay businessmen say that the new moves are meant to "jettison the mixed economy for a policy of complete socialization." Their one hope is that Nehru won't be able to carry the Congress Party, still basically right wing, down the socialist road.

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Panels of the American Marketing Assn. last week pondered how to channel the flood of production that is being loosed by automation. Their consensus:

## The Heat Is on Distribution

Through the drone of statistics and the hammer of earnest oratory, visitors last week at the New York meeting of the American Marketing Assn. could hear the creaks and groans that told unmistakably of one thing: Our distribution structure has a bad case of growing pains.

Two major prerequisites of economic growth have been achieved: a productive capacity that nothing seems to daunt, and, more recently, a market that nothing seems to sate. It is in the third prerequisite—a distribution setup that will satisfactorily hook up the other two—that the strain shows.

Keynoter of this sense of strain at the AMA sessions was New York University's Peter Drucker. Said Drucker: "There is trouble ahead for marketing. The present structure is beginning to crumble at the edges. New methods of marketing, new pricing concepts, new channels of distribution are called for."

• Revolution—Drucker's speech was

channels of distribution are called for."

• Revolution—Drucker's speech was called Automation: Forerunner of a Marketing Revolution. In fact, said Drucker, marketing has already had a

revolution. We are and will be living in a mass distribution economy. But we will have to go much further than we have yet gone.

Automation, to the marketing men, simply means the increased productivity of the postwar years. And in that sense, automation threatens to swamp the existing marketing structure.

Even now, Drucker says, distribution channels are hard put to it to take the flood of goods. As production becomes more automatic, output will become more rigid. The marketers, he said, will have to supply the flexibility for shortrun ups and downs in demand. But Drucker didn't explain how they would do it—whether by larger inventories at the distribution level, or by higher sales pressure when demand says, or what.

• Critical Point—Drucker did point out that marketing has become the critical area for management, that more and more companies are realizing that production will have to be subordinated to the needs of marketing, not marketing to the needs of production. (General Electric Co. is a case in point; it has had a complete revision of company management along these lines.) In fact, Drucker says, the automation of manufacture is itself primarily a marketing problem.

The never-ending flow of goods from the factory puts pressure on manufacturers to find new outlets. Drucker believes that at least in durable goods the days of the franchised dealer are numbered. He did not amplify this thought, but others have pointed out that the mere existence of the discount house shows how much the franchise has been weakened. And growth of the discount house from what amounted to a bootleg operation to the point where even an ardent franchise, "fair trade" outfit such as W. A. Sheaffer & Co. seeks it as an outlet heavily underlines the point.

Disenfranchisement won't come without a struggle, since distributors and dealers are reluctant to lose their old protected status. Drucker cited the current ruckus in the automobile industry as a case in point.

· Efficiency-But somehow, he argued,

marketing must win something of the degree of automation that production has won. Especially at the retail level, efficiency hasn't yet increased much.

Marketing can't look for much help in the population forecasts for the next few years, Drucker pointed out. While population as a whole is burgeoning, the number of people coming into the work force won't grow materially. "Companies talk about doubling their sales force in the next 10 years," he said, "but where will they get the people?" This puts still more steam under the automation of merchandizing

• Two Directions-Drucker showed that retailers have tried to cope with the problem in two opposite ways. One trend is to split off the nonselling functions from selling functions. In some stores, nonselling activity of the retail clerk takes up to 80% of his time, he

At the other extreme, stores are adopting the supermarket technique of eliminating person-to-person selling wherever they can. Both trends, according to Drucker, have already gone farand the two are mutually incompatible. Individual managements will have to decide whether through automation they can eliminate the burden of paperwork that keeps the sales force from its main job, or whether to adopt another form of automation that will convert stores into order-takers.

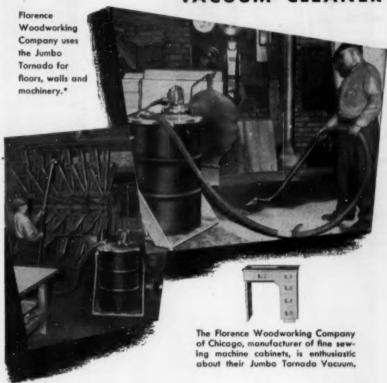
Though Druckers didn't say so, the latter course demands a presold market. This, of course, is where advertising comes in. Preselling puts the burden of selling on the manufacturer. There are plenty of signs in current advertising budgets that manufacturers are accepting what advertising concerns have long preached: that advertising must take the initiative; that the time to sell is when sales fall off (BW-Dec.31'55,p42).

What form of automation could take over the nonselling functions if that course were elected Drucker didn't sav. He shrugged off electronic computing systems-of which so many retailers are proud-as a "crutch to inefficiency." Yet many others find computers a logical answer, as the need for volume crowds more and more outlets under single management umbrellas, and the problems of central buying and shipping multiply.

· Pricing-Automation of manufacturing puts further stress on the need for new pricing concepts, Drucker went on. He cited no examples, but others find evidence everywhere of the weakness of today's pricing structure. The latest striking sign of it was GE's drastic price cut on its traffic appliances (page 96). Fair traders are battling the concept of lower, freer markups. But they appear to be fighting a losing battle. Even large department stores, such as Carson Pirie Scott, Frederick Nelson, and Filene's,

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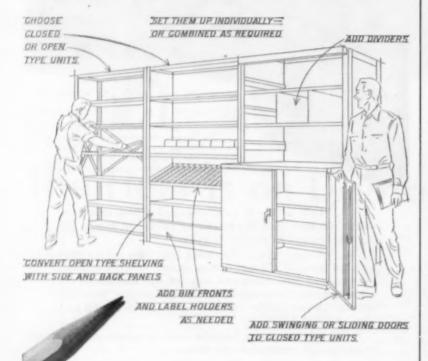


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are seeking ways around the pricing problem through warehouse sales; others through accepting trade-ins, and countless others through the simple expedient of meeting discount-house price competition.

Narrower margins, especially in hardgoods, do raise the bogey of service. This is a specter that haunts the discount house, and may force it to upgrade by providing service. Manufacturers are having to accept more and more responsibility for this function. Drucker suggested a novel way out: that rentals, rather than outright sales, might solve the problem—presumably with a central organization providing the service, as it does in an apartment house.

 Inventory—Drucker did not touch on one other inevitable problem that high speed production heightens, but Myron S. Silbert, vice-president of Federated Department Stores, did. That is the ancient headache of the inventory. As production requirements become more rigid, this headache is apt to throb even harder.

The secret of merchandising, Silbert said, is to have on hand "plenty of best-selling items, few poor-selling ones." He didn't say how you achieve this, but he did feel that new electronic equipment may help.

Manufacturers have already resorted to a crude sort of feed-back operation to keep production and inventories in line with demand—a technique that Silbert cited. This is the system of warranty cards, which a consumer sends to the manufacturer when he makes a purchase (BW-Jan.22'55,p50). Some less cumbersome apparatus may be developed to keep all points of distribution up to date on what is moving, what isn't. Whatever the system, greater efficiency in distribution will have to offset the greater rigidity of production—no mean trick in itself.

An increased flow of goods calls for all-out efforts to put the goods where the consumer will buy them. Wendell R. Smith of Alderson & Sessions pointed out that the recent so-called "scrambling" of merchandise—nonfoods in supermarkets, for example—aims to regroup products for the convenience of the consumer, not the retailer.

One question the experts didn't try to answer. The entire session last week was geared to mass selling. The question arises: How is automation going to fit into a market that is also seeking the prestige item—the woman who pays \$80 for a stuffed tiger toy for Christmas (BW—Dec.17'55,p32)?

Federated's Silbert may have an-

Federated's Silbert may have answered this question. Consumer income will grow 40% in 10 years, he estimated, and almost 100% in 20 years. With that kind of money to build on, there will be room for many types of distribution, many types of stores. EMD



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THINK FIRST OF CORRUGATED



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Monomonee Falls, Wis, (Milwaykee Area

#### THE MARKETING PATTERN

## GE's Move: Portent for Dealers

G ENERAL ELECTRIC'S move in cutting prices on its small appliances (BW-Dec.31'55,p21) may be the beginning of a new era in businessmen's attitude towards distribution costs.

The move took on double significance, coming as it did-by coincidence-at the time of the American Marketing Assn.'s winter session in New York, where the problem of distribution costs received sharp

What was really important about GE's move-and this point was made in at least one AMA panel session-was that the company not only cut its prices, but at the same time cut the discounts going to its dealers and distributors. As of this week, the share of the final selling price going to the latter two groups together will be 45% instead of about 51% as heretofore.

In doing this, GE has belatedly recognized the effects of the socalled "discount revolution." It is now clear not only to GE but to almost everyone that the discount structure on appliances, set years ago, is too high for today's conditions. The old margins were set in days when appliances were new and volume was relatively low as compared with appliance sales today.

But until now very little realism has been shown by manufacturers in considering this problem. They have continued to operate on the old inflated discount structure. which has become more and more meaningless in the face of pricecutting at the retail level. Indeed, the inflated discount structure was an open invitation to price-cutting.

Whether GE has shrunk the margins far enough remains to be seen. But as one price-cutter was forced to admit, the action at least is "a step in the right direction."

N GIVING its reasons for the move, GE made some observations that have a general bearing on present trends in distribution costs.

One important reason for cutting margins, GE says, is the fact that it. like other manufacturers, now assumes a bigger share of distribution and marketing expense. Manufacturers of branded goods today do a bigger job of preselling their lines. In effect, this has transferred some of the cost of distribution from distributors and retailers to the companies themselves.

This shift has received, as it were, official recognition. It is quite possible that other companies may now follow GE's lead in examining the services contributed by them in relation to those contributed by distributors and retailers, with important effects on the cost of distribution.

second important aspect of GE's move was also underscored at the sessions last week. Reavis Cox of the University of Pennsylvania made this observation in a paper examining the different ways in which distribution costs are viewed by different segments of the economy:

"Struggles concerning dealer contracts and margins . . . seem to me to give evidence that manufacturers are increasingly looking upon dealer margins simply as prices paid for services and that they are to be bargained over like any other purchases.

Cox's remark provides the link between what is happening on the automobile and appliance fronts. The car companies, like GE, are also trying to get their dealers to accept volume in lieu of high margins. This is not a welcome idea to many retailers, but it becomes fairly clear, from what is happening in autos and appliances, that increasingly distribution is going to have to accept the new concept.

NDEED and this is the third important point to be derived from GE's action-GE people would like to see dealers and retailers in general stop thinking in terms of percentages and think instead in terms of dollars. Here it is in tune with other marketing thinking which holds that by concentrating on discounts, retailers have forgotten that what really matters is what is left in the till after the business is done.

This point of view is being accepted by department store people. In an effort to combat price-cutting in appliances, many of them are thinking once more in terms of volume rather than high markups. It is quite likely that in this deemphasis of percentage thinking, the GE action will have its most significant effect.

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## They Were Saying at AMA ...

". . . Mergers sweeping the food field are not a threat to independent retailers."

Robert W. Mueller, editor of Progressive Grocer, said that he believes the chief impetus that lies behind the mergers of a number of large food retailing chains with smaller ones is the difficulty that has been experienced by the large food chains in maintaining volume.

The evidence Mueller presents: The six biggest chains accounted for approximately 25% of total retail food sales in 1941; in 1954 they accounted for only 23%.

#### ". . . In department stores close competition may help rather than hinder sales."

The people at the American Marketing Assn. meeting heard this significant conclusion brought out by Michael Halbert of Alderson & Sessions, in a discussion of his company's recent study of women shoppers (BW-Nov.12'55, p.58)

Investigators discovered a shopping phenomenon that they termed "shopping by store clusters." This means that women prefer to shop in stores that are both close geographically and similar in character. Tests in which women were asked to rate their first and second store preferences revealed that when the first choice was a store in a group composed of stores that were closely located and of the same character the second choice usually fell in this group, too. When the first choice was in a group varying either in geographical proximity or similarity of character the second choice usually was in another

Closely related to store cluster shopping is the question of how many stores a shopper visits before making her purchase. The evidence shows that the vast majority of women buy in the first store visited. Over 90% of sales were accounted for by the first two stores entered. Halbert concluded, "This means that there is considerable justification for retailer strategy which is designed to entice customers into the store."

Facts were presented bearing on two decisions faced by retailers: First, whether to carry a large variety of a few types of items (a deep assortment) or many lines with a few items in each line (a wide assortment), and second whether to price in a narrow or wide

Researchers found that customers preferred first of all the stores with wide product lines and wide price ranges. But their second choice was the other end of the rule, stores with deep assortments and narrow price ranges. This means women prefer a definite policy on the matter one way or the other. The poorest showings were made by stores that tried to follow a middle course, with a medium product and price line.

## ". . . Salesmen are working their way down the ladder of success rather than up it."

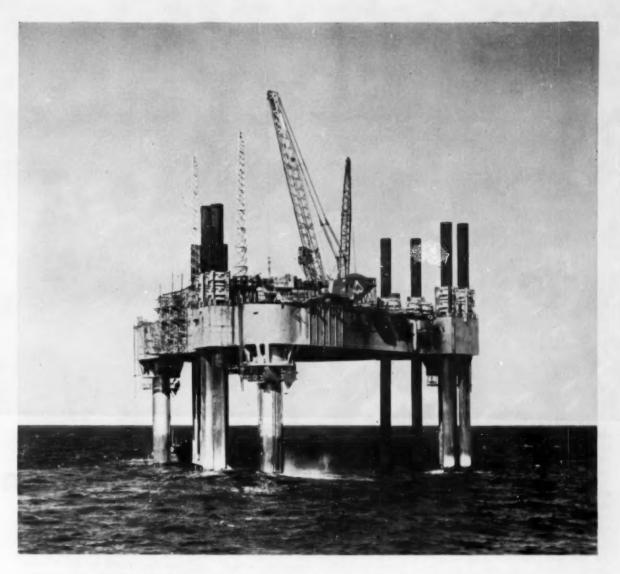
That startling remark was only one of a number of provocative conclusions reached by Prof. Raymond W. Mack of Northwestern University when he set out to explode a few "popular myths" about the salesman. In his talk Who Is the Salesman?, Mack told the audience that the salesman in the gregarious "joiner" he is often depicted, that he doesn't particularly like his job, and that he is an unstable employee.

These views emerged from Mack's study of occupational behavior that involved, among other things, comparing a group of about 1,400 salesmen to a similar group of engineers and middlelevel bankers. His study revealed that salesmen are far more often sons of proprietors, managers, and professional people than of unskilled and semiskilled laboring families. Thus, says Mack, in terms of income and prestige they have moved down the social scale rather than up. As for joining, approximately two-thirds of the men queried either held no memberships at all in associations or belonged to only one.

When asked what they liked about their jobs, salesmen, unlike engineers, seldom mentioned the nature of the work itself. The chief interest was money. But this was a source of grave dissatisfaction. For example, the salesmen on an average earned far less than the engineers. But in response to questions, they revealed that they expected to earn as much. As Mack phrased it, "most salesmen want incomes which less than 1% of the salesmen in the country get."

With incomes way below their hopes and with lack of interest in the job itself, salesmen make unstable employees. Mack said that migratory workers are the only occupational group in the country that ranks lower in job

stability than salesmen. END



### Sentinel of steel to guard our shores

It's been called a "Texas Tower" because it resembles those big barges used to drill oil off-shore in the Gulf of Mexico. But there the similarity ends. For this lonely steel structure, standing way out on the edge of the continental shelf, 110 miles east of Cape Cod, is a radar island. Its purpose is to flash an advance warning so as to gain extra time for defense in case of a sudden air attack on the United States.

The steel island is shown above as it appeared during installation. It is triangular, measuring 200 feet on a side. Of the vertical tubes in the picture those that extend above the deck are temporary supports to be removed

when the installation is complete. Permanent support comes from three massive steel legs 10 feet in diameter, containing concrete for added weight and stability, and reaching down 48 feet into the hard-packed sand of the ocean floor.

The island is essentially a two-story building, with air-conditioned quarters for the 50 members of the Air Force who man it and operate the long-range radar equipment, to be installed in three domes mounted on the deck.

Bethlehem Steel's shipyard at Quincy,

Mass., built this radar island for the Navy, the Air Force taking over when the structure is ready for operation. After it was launched, powerful tugs towed the island of steel to Bethlehem's shipyard at East Boston, where it was outfitted, and from there on to its permanent location at sea.

This is the first of a series of radar islands to be posted along the Atlantic Coast, from Newfoundland to Norfolk, Va., providing a chain of far-seeing, wary eyes to keep a constant watch on the skies to the east.

BETHLEHEM STEEL





LAST WEEK'S MEETING of the American Economic Assn. was built around discussions of growth. It left everyone wondering . . .

## Why Economists Struck Out on

A cross section of U.S. economists at their annual convention in New York last week tackled the hottest question of the mid-Twentieth Century: economic growth. By and large, they flubbed it.

The meeting left the impressionboth on members of the profession and on outsiders-that economic growth is just too complicated a subject for economics alone to handle.

But three major developments have made it next to impossible for economists to avoid the question:

· The struggle of the underdeveloped countries to grow and-if they can-to catch up with the richer West.

· The cold war competitionwhich some day might get hot-between the Soviet Union and the U.S., in which victory or defeat can hang on the pace of industrial development.

 The unusually rapid postwar growth of the U.S. economy, par-ticularly in the boom year 1955, and the hopes and fears to which this rapid growth gives rise.

· Disappointing-The problems arising

out of these developments made the subject of last week's meeting the hottest one in years. But the way American economists tackled these problems turned out to be disappointing-in fact, boring-to the participants themselves. Formal sessions-as you can see in the picture above-were relatively lightly attended and provoked little discussioneither in the meeting rooms or in the

There was widespread feeling among the economists that they had failed to prove they had much to contribute to this powerfully urgent subject-a subject on which the national future and the outcome of the present interna-tional "time of troubles" may depend.

Some economists left the meetings with a feeling that this failure might turn out to have a healthy effect-by demonstrating the weaknesses and inadequacies of contemporary economics. For it became increasingly clear that economics as it exists today is incapable of roving over the vast terrain covered by the concept of economic growth.

· Wide Boundaries-One of the most

brilliant economists of the Twentieth Century, the late Joseph Schumpeter, had already indicated before his death how wide the boundaries of the subject are, how they stretch outside of ordinary limits of economics. Understanding economic growth, he suggested, involves a study of such factors as:

· Physical environment, natural resources, commercial location, maritime opportunities.

· Social organization, including all of our institutions, such as property, contracts, credit systems, taxation, labor unions, public or corporative regulation of economic activity.

· Politics-meaning not only national elections and the day-to-day conduct of the nation's business, but also such disturbances as wars, inflations, revolutions (violent or peaceful)-and people's expectations about all such

· Human beings-not only their number and their tendencies to multiply, but also their qualities, moral, intellectual, and creative.

· National "spirit"-embodied in



## a Hot Issue

the people's ideas and beliefs, religious or other, and their attitudes toward work, saving, risk-taking, and so on.

The factors listed clearly reach into areas far beyond the province of eco-

nomics itself.

· Stimulus-This necessity of pushing out the borders is thus being forced upon economists by the problem of economic growth. And it has already, according to Stanford University's Moses Abramovitz, "shaken the complacency of students with regard to the sufficiency of their own specialties."

Abramovitz thinks that "no other problems in recent decades have so stimulated efforts toward the unification of the social sciences as have the problems of economic growth.'

The brightest view of the 1955 American Economic Assn. convention would be that it marked the birth agonies of a new and broader discipline combining the tools of all the social sciences-sociology, psychology, and the rest-along with traditional economics.

• Slow Going-But it looked like a very slow birth. W. Rostow, of the

Massachusetts Institute of Technology, couldn't see economists getting the growth problem whipped into a meaningful economic theory "for several fur-ther decades." Rostow elaborated this view in his chapter in the 677-page volume on Capital Formation and Economic Growth that the National Bureau of Economic Research brought out just in time for the convention.

#### I. The Theorists Began It

The problem of growth itself is not new. It was certainly one of the major themes of earlier writers on economics -writers who tended to take the whole range of social problems for their field. Adam Smith's great theme was the problem of the wealth of nations and how it grows. Smith's line, which ran down through John Stuart Mill and Alfred Marshall, went like this: A nation-unless it's gutted by wars-will grow at a rate determined by the increase in the number of its people and their willingness to save a part of their income to build up capital. The growth in numbers-helped along by free trade among nations-will cause a widening of markets; and this will result in division of labor. Dividing up tasks of production among many workers will increase productivity, accelerate the whole growth process.

· Technology and Business-For Adam Smith, division of labor was a catch-all term that covered all technological progress. Mill and Marshall, on the other hand, saw technological change as a sort of outside factor, a gift of the

scientists and engineers.

Schumpeter got back closer to Smith in regarding technology as a natural result of capitalist development. But Schumpeter saw growth not as a kind of inhuman, vegetable process, but as something caused by people-especially by businessmen, who tried to stimulate the technicians and to put technical innovations to practical use.

· A Long Line-But economists have by no means had a monopoly on the fashioning of theories of growth, which are really nothing more nor less than theories of history or social change. The literature of the Seventeenth to the Twentieth Century is full of mighty theories and prophesies, to name only those of Condorcet, Marx, Max Weber, Oswald Spengler, Arnold Toynbee.

#### II. Army of Specialists

Until the growth problem disturbed their peace, most Twentieth Century economists had been content to deal with the simpler, narrower problems of production and distribution, measurement of economic activities. Schumpeter, a prophet himself, was expressing the general view when he said he shared

## Build on a tight budget with no regrets



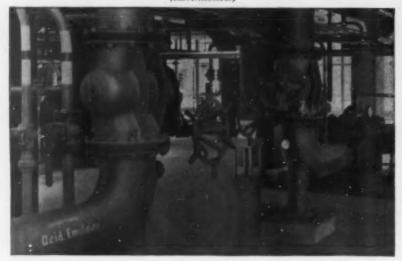
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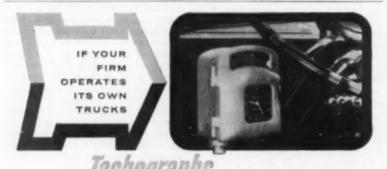
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the aversion to "theories" or "philosophies" of history.

"They were at best," said Schumpeter, "premature attempts at exploiting inadequate historical information, and at worst, rank dilettantism, the products of preconceived ideas—or ideological fantasy even—rather than of serious research."

The typical American economist today shrinks in terror from committing the sins of "rank dilettantism" and "ideological fantasy." He will give you "serious research" until he breaks the heart of the typographers who have to set all those tables—or (if he is an econometrician) all those diagrams and mathematical equations. The economics professor today is characteristically a man who has specialized intensively on a particular area of economics.

• Outnumbering the Problem—This specialization has left individual American economists not too well prepared to face up to a broad-ranging subject such as economic growth—one that overruns the separate economic specialties.

But since the vast problem couldn't be ducked, the American Economic Assn. sought to overwhelm it by sheer force of numbers. So a host of specialists delved into:

The production economics of economic growth.

The consumption economics of economic growth.

 The value and pricing aspects of growth.

The income distribution aspects of growth.

 Government expenditures and the long-run goals of growth.

 Government expenditures and the short-run goals of growth.

The monetary role in balanced economic growth.

 Confusion—But it was a question whether this massive attack did more to clarify or more to confuse the question—either in its total impact or in individual sessions on particular topics. Here's what you heard, for example, on monetary policy and growth:

• Charles R. Whittlesey, of the University of Pennsylvania: "For the present, economic growth must be content to be . . . a somewhat platitudinous expression of good intentions rather than a concrete determinant of central banking policies."

 Edward S. Shaw, Stanford: "Economic growth should be elevated to the top pedestal of policy objectives."

top pedestal of policy objectives."

• Howard S. Ellis, California:
"Economic growth as an objective is extraneous and even pernicious."

#### III. In Search of a Prophet

Judging by last week's performance in New York, it looked, to paraphrase a famous dramatic review, as though the economists had tackled growth,

but growth had won.

What seemed most desperately lacking was somebody with a fresh, comprehensive view of the problem, who could give shape and meaning to the endeavors of the individual specialists.

The convention seemed in search ofcertainly, in need of-a prophet to pull the big problem into sharp focus.

In economics, a fresh theory full of insight—one cutting through vast areas of confusing detail—has in the past proved the best method of stimulating empirical research, opening up large areas for policy change. The essentially

abstract Keynesian doctrine had that effect on research regarding unemployment, monetary and fiscal matters, national income, forecasting, and other fields.

At other times it has happened (for instance, with the concept of monopolistic competition) that a seemingly bright idea has turned into a fad, and many economists have wasted their time trying to say something original and profound about a vast subject that defices their limited art. Last week's convention prompted a number of the economists present to come to that conclusion regarding the attack on the problem of economic growth.

## Family Fight Over Credit

Head of New York Federal Reserve attacks present controls as too limited. He wants more detailed measures, including regulation of consumer credit.

A long-smouldering fight within the Federal Reserve System blew up into a blaze last week at the annual joint meeting of the American Economic Assn. and the American Finance Assn. (page 98). Allan Sproul, president of New York's Federal Reserve Bank, took part of his speech to dress down economists for failing to deal with current economic problems. He also deliberately picked a fight with a large body of economists and with Federal Reserve officials on some major issues of credit policy.

Sproul served notice that he was prepared to battle on three major

fronts

Specific credit controls. Sproul wants to supplement the present general and indirect controls over the total volume of credit with selective controls over consumer credit and mortgages. He favors permanent reinstatement of the authority under which the Federal Reserve administered Regulations W and X. This would mean that, when the Fed considered it necessary, such industries as autos would have the terms on which their products were sold set in Washington.

Money market operations. Sproul is against the present technique that limits the Fed to dealing only in 91-day Treasury bills. He wants the Fed's Open Market Committee to be free to influence directly the entire interest rate structure. And he wants it to use

that freedom.

The Open Market Committee. Sproul wants the present composition of the group—the seven governors of the Board and five of the 12 Fed bank presidents—to remain unchanged. He warned that he would fight any Congressional

attempt to destroy the committee by giving its powers to the governors alone.

Sproul's stand on these three issues reveals that he has reached the point of a public break with the Federal Reserve Board in general and with Fed Chmn. William Martin in particular.

• Interventionist—The No. 1 man in the biggest of the regional Fed banks, Sproul has advocated a much more vigorous brand of intervention in the money and credit markets than Martin. But until now, the dispute has been carried out within the system.

Sproul's demand for permanent authority to use Regulation W and X will meet with approval from many congressmen. Rep. Wright Patman of Texas and Sen. John Sparkman of Alabama have both criticized the lack of controls

over these areas.

Actually, Sproul wants specific controls because he thinks the general weapons of restraint do not operate fast enough. As he sees it, the "temptation to abuse consumer credit in boom times" makes it a serious source of instability. He wants to use a specific control to make sure that it doesn't get out of hand.

• Detailed Controls—Sproul's demand for a program of money market operations that would directly influence the structure of interest rates also arises from his doubts about the effectiveness of general controls. He and Chmn. Martin have had a long dispute over this point and particularly over the way it applies to the Fed's open market operations.

The main task of the Open Market Committee is to influence the nation's credit supply (BW-Mar.19'55,p110).

It does this through the sale or purchase of government securities for the Fed's portfolio. Any purchase of securities adds to the reserves of the bank system, thus increasing the credit supply; and any sale decreases reserves and credit.

Under Martin, the committee has dealt mainly in 91-day Treasury bills, the shortest-term government security. It is Martin's view, shared by a majority of the system, that the "billsonly" policy causes a minimum disturbance to the interest rate structure. Martin has argued that dealing in a broader range of securities would lead to a rigging of interest rates and an end to the concept of a free market.

Sproul thinks that sticking to bills limits the ability of the Fed to carry out credit policy. He wants to influence directly the interest rate structure by buying and selling securities of all maturities. He is against pegged bond prices, but he wants to "nudge the market in the direction sought by credit

policy."

Undoubtedly, Sproul felt emboldened to argue for this change because the Fed temporarily abandoned its bills-only policy during the Treasury's December financing (BW—Dec.24'55,p24). Sproul has always felt that the Fed must assist the Treasury's financing operations as a matter of routine. But the fact that he admitted he was still fighting a losing battle is evidence that a majority of Federal Reserve officials still consider aid to the Treasury as a desperation measure.

• To Fight or Not-The Federal Reserve Board did not comment on Sproul's statements. Martin, for one, would like to avoid an open battle and would rather keep the dispute in the

family.

But Sproul seems intent on a public battle. He demonstrated this in outlining his stand on the composition of the Open Market Committee. Patman and others have criticized the committee because Fed bank presidents take part in its decisions. The presidents, Patman has charged, are tools of commercial bankers.

Not so, said Sproul. The presidents serve in the public interest, and provide first hand impressions of business conditions that the governors cannot get

elsewhere.

 Whose Ox?—Sproul's defense of the present committee is understandable.
 He himself is a member. And his New York bank manages the system's account.

By stating that he would fight for the present setup, Sproul was attacking the Board, and Martin, for keeping silent. His speech was designed to make the Federal Reserve Board take a stand for or against the proposal in Congress. END

## **Buyers Were Picky and Choosy**

1955's "Market	of	Stocks"
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Some	of	the	lead	ers	

1954		Ronge	Last	1955 G	ata:
Close	High	Low	Week	Maximum	Now
Evans Products\$ 8.42	\$ 26.87	\$ 7.87	\$ 24.75	219.1%	193.9%
Schering Corp 24.12	57.75	22.00	52.00	139.4	115.6
Reynolds Metals 24.45	60.00	21.87	52.37	145.4	114.2
Seiberling Rubber 8.62	20.37	8.37	18.25	136.3	111.7
Kaiser Aluminum					
& Chem 19.92	43:37	18.62	41.87	117.7	110.2
Visking Corp 66.00	127.00	68.00	124.25	92.4	88.3
Aluminum Co 45.00	88.00	42.87	83.50	95.6	85.6
American-Hawaiian					
\$5 71.00	130.00		121.00		70.4
Peoria & Eastern Ry. 56.75	97.00	52.00	95.00	70.9	67.4
Curtiss-Wright Corp. 17.62	30.25	15.75	29.00	71.7	64.6
Bath Iron Works 34.25	72.75	33.50	55.62	109.5	62.4
Dayton Rubber 17.50	28.37	17.25	28.00	62.1	60.0
Zenith Radio 89.50	142.50	86.00	142.00	59.2	58.7
U. S. Steel 36.84	62.25	33.75	57.87	69.0	57.1
American Potash "B" 70.00	111.50	67.00	108.75	59.3	55.3
Delaware & Hudson 55.50	86.00	51.50	85.50	55.0	54.1
Fruehauf Trailer 37.37	56.87	34.25	56.87	52.2	52.2
Royal McBee 20.62	32.87	19.00	31.25	59.4	51.6
Bethlehem Steel 109.12	169.50	101.50	164.50	55.3	50.8
Emerson Electric 19.12	29.00	19.00	28.50	51.7	49.1
Rohm & Haas 266.00	400.00	257.00	395.00	50.4	48.5
Superior Steel 20.50	33.37	18.25	30.37	62.8	48.1
Armco Steel 36.00	53.62	32.62	53.25	48.9	47.9
Beaunit Mills 24.87	38.62	22.12	36.75	55.3	47.8
Addressograph-		-			
Multigraph 88.00	130.00	77.50	130.00	47.7	47.7

#### . . and some of the also-rans

	1954		Range	Last		Gains
American Cable &	Clese	High	Low	Week	Maximum	New
Participant Sames Sa						
Radio	9.50	9.75	6.12	6.12	+2.6	-35.6
American Motors	12.00	13.37	8.50	8.75	+11.4	-27.1
Anderson, Clayton	45.00	44.50	32.37	32.87	-1.1	-27.0
Westinghouse Electric	80.50	83.25	53.25	58.75	+3.4	-27.0
Cone Mills	23.37	24.87	17.00	17.62	+6.4	-24.6
Admiral Corp	28.75	30.25	20.25	21.75	+5.2	-24.3
International Min. &						
Chem	41.00	41.50	28.50	31.12	+1.2	-24.1
lehn & Fink	21.62	22.00	16.00	16.62	+1.8	-23.1
Fedders-Quigan	13.00	13.37	9.00	10.00	+2.8	-23.1
Studebaker-Packard	13.62	15.37	9.00	10.50	+12.8	-22.9
P. Lorillard	25.75	25.87	20.00	20.12	+0.5	-21.9
Bullard Co	41.75	47.87	27.12	33.00	+14.7	-21.0
Ellion Co	28.87	31.87	20.25	23.12	+10.4	-19.9
Pet Milk	67.00	73.50	48.25	54.00	+9.7	-19.4
American Agric.	07.00	73.30	40.23	54.00	+7.7	-17.4
Chem	88.00	91.50	70.00	71.25	1.40	-19.0
					+4.0	
chenley Industries	26.37	27.37	20.00	21.50	+3.8	-18.5
Celanese	25.87	26.25	19.12	21.12	+1.5	-18.4
Gamewell Co	34.87	39.00	28.12	28.75	+11.8	-17.6
20th Century-Fox Film	29.75	31.62	24.25	24.75	+6.3	-16.8
PennTexas Corp	22.00	22.87	17.50	18.50	+4.0	-15.9
Carrier Corp	62.50	64.75	48.12	55.00	+3.6	-12.0
Atlantic Coast Line	.1 00	59.50	41.25	45.12	+16.7	-11.5
National Biscuit	17.75	45.25	37.50	39.00	+3.4	-10.9
N.Y., N.Haven &			,			
Hartford	34.37	39.00	28.00	30.75	+13.5	-10.5
Abbott Laboratories.	48.37	48.37	37.87	43.37	0.0	-10.3
						Dausiness week

The outstanding characteristic of the 1955 stock market was its high degree of selectivity. Look at the shares listed at the left, and you'll see why an investor's appraisal of whether the bull market is alive or dead depends on what issues he has been holding.

Of course, when an issue has been up 219% from its 1954 close, then closes 1955 only 194% above it, as Evans Products did, you won't hear much squawking from shareholders. But other issues were up anywhere from 10% to well over 15% at times during the year, yet closed the year with losses ranging from 27% to 11%. These are the ones that hurt.

• Tamer Bull—In retrospect, it is obvious that 1955 provided a much tamer bull market than 1954. The biggest slacking-off in the rate of the price rise came in the last half of the year. Standard & Poor's index of 50 industrial stocks gained around 30% for the year, compared to 52% in 1954. But the character of the 1955 market is better revealed in a couple of other statistics.

In 1954, the year's gains were split about 50-50 in each half of the year. Last year, 23% of the gain came in the first 6½ months, only 7% in the last 5½ months. December, 1954, brought a 6% gain for the industrials, while last month showed no gain whatever.

 Choosy Rise—The selectivity of the labored ascent of the last few months of the year is underlined even more by the figures for more than 1,000 Big Board issues compiled by Harold Clayton of Hemphill, Noyes & Co.

From the time of Pres. Eisenhower's heart attack to yearend, about 52% of those issues rose 1½ points or more. Another 22% were up less than that or were unchanged. Nearly 26% were actually lower than their Sept. 26 closing price.

• New Start—The new year's first session may not have seemed auspicious compared to 1955's opener, but Streeters didn't complain too loudly. The 50 industrials were off 3.67 points, compared with a gain of 9.30 points on Jan. 3, 1955. But that day's movements a year ago, centering about GM's rumored stock split, resulted in the Fulbright hearings and a margin hike.

The fact that there is no reason for such an aftermath this year was about the only solace Wall Street's bulls could find, however, to make up for the absence of the hoped-for yearend rally.

As one analyst said, "The yearend rally evidently began and ended on Dec. 30." END



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Question: How many years is x years? The number varies with the business. Your Royal Representative will be happy to study your case and make a recommendation.

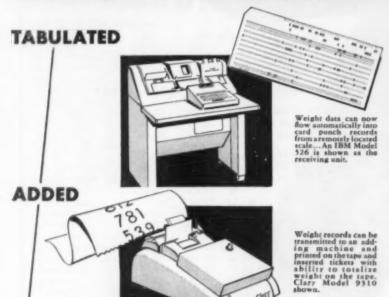




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## Wall St. Talks . . .

. . . about stock market prospects . . . typical holder of open-end fund shares . . . drop in Norwich stock.

Whither the stock market now? Here are two prominent Street opinions—Moody's: "Nearby prospects, the next month or so, probably favorable; year-ahead prospects, probably unfavorable; long-term prospects, very favorable." Walston & Co.'s Edmund W. Tabell: "I believe the 1956 range (of the Dow-Jones industrial average that closed 1955 at 487) will be a 520 high and 430-420 low."

Holders of open-end investment trust shares aren't quite the "little fellow" type of investor as many people have long believed. The typical holder, according to a National Assn. of Investment Companies' survey, has an annual income of \$7,000, holds \$4,900 worth of fund shares, owns \$12,900 worth of other corporate stocks, has \$3,600 in the bank or in savings bonds, and also holds \$9,200 worth of life insurance.

Norwich Pharmacal took steps Monday to scotch the rumors that were held largely responsible recently for sending its shares rocketing 62%, or from \$33.37 to \$54. Pres. Melvin C. Eaton said there is no indication that any group is trying to take over the company, and he labeled ridiculous the yarn that profits of new drugs Norwich hopes to start marketing this fall will more than double its 1955 income by 1957. (Profits in 1955, he said, ran around \$3 a share and should total some \$3.50 in 1956.) Streeters applauded Eaton's action, but the market didn't—on receipt of the news the price of Norwich stock dropped \$3.95.

Causing this week's sharp sell-off in the aircraft stocks was news that a House armed services subcommittee will try to find out if Uncle Sam has been getting his money's worth lately on military aircraft (page 84).

1955's most actively traded commons: On the Big Board: GM, which split 3-for-1 last year, took top honors. The issue racked up a pre-split 4,102,-700-share trading volume and a 3,013,-800-share total after the split was consummated. Pennsylvania RR, with trades involving 6,309,000 shares, came in second. On the American Exchange: Webb & Knapp, which closed at \$2.37, led with 6,336,000 shares; runner-up was Sapphire Petroleum (\$3.06) with 4,524,800 shares.



JOSEPH P. SPANG JR.

Portrait by Fabian Bachrach

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> JOSEPH P. SPANG JR., President The Gillette Company

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eliminate wasted time. Here you see eight simplified finding systems that pay for themselves. *Hundreds of other system ideas* throughout the book.

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### PERSONAL BUSINESS

BUSINESS WEEK JAN. 7, 1956



You may have made a sound New Year's resolution—to live within your income. And right now you may be wondering how you can do it.

There's a good chance that you don't do so now—even if you make big money. Accountants say that the failure of seemingly well-off businessmen to make ends meet is extremely common.

For some reason, they say, executives have difficulty applying to their private lives the very principles that have put them where they are in business.

What is the solution? Contrary to what you may think, it is not an arbitrary budget. Instead, it calls only for a little common-sense management of basic personal finances, reserving for yourself complete freedom in how you spend.

This is a great deal different from setting up a budget. There is little doubt among the experts that the arbitrary budget has become both outmoded and unworkable as an effective means of controlling personal income. It is far too rigid a system to fit today's complex way of life.

Budgets were once a sensible financial tool for families. They worked well in the era of the 10- or 12-hour day and the six-day week. Life was much less complicated: It consisted mainly of work and sleep; leisure time was no problem. Wants were limited.

In other words, the temptation and the opportunity to spend money were almost nil, whereas now, in mid-Twentieth Century, both are almost unlimited.

Therefore a budget is too inflexible these days.—so much so that it allows no room for necessary give-and-take even on a low-income level. It's even more impractical for executives, since they have a wider choice of ways to use their disposable income.

You will do much better in managing your money, then, if instead of a budget you apply a few simple procedures. Here is what top personal financial consultants recommend as an effective working basis:

Set down on paper the amount of income you have available over a given period of time—say six months or a year. Then write down all your fixed and unavoidable expenses—items such as income tax, real-estate and other taxes, interest and amortization payments, other debts, insurance premiums, savings, and the like.

Deduct the sum of all these from your complete actual income. The balance, of course, is what you will have available for day-to-day living expenses.

It is important for you to remember that you should have a sense of freedom as to how you spend this balance; you can buy with it what you want, placing your values as you wish—but always remembering that spending more than you earn is poor personal management.

But right here is the crucial point in successful money management. Here is where the experts say many executives get an attitude that is a bit too free, and spend themselves into the red before the year is out. What happens is that they are likely to consider this balance a more-or-less elastic thing even after they have made a big purchase.

For example, you should feel free to take your family on a month's

### PERSONAL BUSINESS (Continued)

BUSINESS WEEK

JAN. 7, 1956

cruise, say, this winter. But if you do, you should adjust this expense into your "working money" and readjust your other activities downward. Otherwise, you will overspend.

In the same way, the amateur boating enthusiast can indulge his fancy by distributing the financial load over the year. Even in the matter of food, there is the possibility of wide extremes. The family that likes to entertain in gourmet style must figure the cost as a supplement to normal food allowances.

All this may sound too theoretical to work out. But put into practice, this little time spent in planning may surprise you by giving you more for your money. Certainly it will mean freedom from worry, and peace of mind.

Dry skin is a common winter annoyance in cold climates. Its effects can range anywhere from an unpleasant sensation to painful rawness.

The skin is likely to start drying out when the relative humidity falls below 60%. Then cold air constricts the superficial blood vessels, interfering with oil and sweat secretions.

Other factors act as irritants—too many hot baths, alcohol rubdowns, too much contact with alkaline soaps and detergents, too much alkali in the water supply, too little humidity in the heated air of your house.

If your skin is excessively dry, you should consult your doctor. Probably he will prescribe a lotion or ointment that includes some medication. If the dryness isn't too bad, try experimenting with lotions yourself. Animal, vegetable, or mineral preparations, under various trade names, may be enough to do the job. Even light mineral oil is adequate for some people.

Note that most of these preparations work better as preventives than as cures for dry skin. If you know that dry skin is a problem, try using them before your skin dries out, applying at bedtime. They give a protective coating that excludes air, prevents evaporation of water from the skin.

People with extremely dry skin may feel they can't tolerate baths at all, and limit their bathing to sponge baths. But sometimes just two or three teaspoonfuls of an oil lotion in their bath will be enough to offset bathing's drying effects.

Note for your calendar: Jan. 16 is the last day for you to amend your estimated tax for 1955. Also, it is the deadline for payment of the final installment of your estimated tax.

Snowed-in boating fans can start planning for next summer if they or their communities are interested in having launching ramps, docks, or piers built for small boats.

A new 18-page booklet just published by the Outboard Boating Club of America gives several plans, estimated cost, tells how to get permits, how to get working drawings prepared, awarding contracts. The booklet is free from OBC at 307 North Michigan Ave., Chicago 1.

Another dividend on GI insurance is due this year. Remember that this dividend is not taxable income, but instead is a reduction in premium cost. Therefore you are not required to report it.

Contacts apprighted under the general copyright on the Jan. 7, 1888, Issue-Business Week, 830 W. 42nd St., New York, N. Y.



# for over 26 years U. S. Rubber Expansion Joints have been doing just that!

New Orleans nestles in a saucer. Surrounded by water, many of its areas are below sea level. Add to this one of the heaviest rainfalls in the country (as much as 15 inches in 17 hours) and you can see that this glamour city could easily be flooded.

But the New Orleans S&WB\* keeps the city's feet dry by means of a pumping system that carries off the rain. Turbogenerators supply the power not only to operate this drainage pumping system but also the separate sewage pumping and the water supply systems.

26 years ago, one of these turbo-generators (in use 98% of the time) was equipped with 5 United States Rubber Company Expansion Joints. Why? To allow for contraction and expansion in pipe lines, and to counteract vibration. Says

the Chief engineer of the S&WB: "The U.S. Joints have never failed in all that time. If any of them ever had, the turbine would be out of use."

U. S. Expansion Joints are widely used in the pipe lines of utility generating plants, municipal water supply systems, office and apartment buildings, ships—wherever pipe lines have to be protected against vibration, contraction and expansion. These joints soon pay for themselves by eliminating expensive maintenance and replacement in pipe lines. They eliminate noise. Once installed, you can count on years of trouble-free service. U. S. Expansion Joints are obtainable at any of the 27 "U. S." District Sales Offices, or write us at Rockefeller Center, New York 20, N. Y.

\*Sewerage and Water Bons



**Mechanical Goods Division** 

**United States Rubber** 



Competing for an elite, big-city newspaper market takes special strategy. So young Ogden Reid is building up his New York Herald Tribune's bigname features (right), financial news (above) . . .

# To Capture Smart Readers

At 30, Ogden R. (Brownie) Reid (cover) is perhaps the youngest publisher of a big-city daily in the U.S. On top of that, his job is one of the profession's most man-sized—rebuilding the New York Herald Tribune.

So far his efforts have been successful. Circulation and advertising linage are up. And though he keeps mum on balance sheet figures—his family, now in its third Tribune generation, owns the Herald Tribune lock, stock, and printing press—he does admit the paper was "comfortably" in the black in 1955. It had been in the red since 1950.

 Battlefield—The big problem that always has and probably always will confront the Herald Tribune is the New York Times. The two papers are alike in many respects. Both appear in the morning; both maintain bureaus and correspondents the world over; each has large business and financial sections; and their editorial pages are influential both locally and nationally.

The Times and the Tribune support not only tremendous parallel news gathering staffs, they must also keep and give space to platoons of editors in charge of such subjects as stamps and coins, the dance, books, art, rods and guns, gardening, cooking, chess, movies, radio, and TV.

The Tribune, for example, has four staff music critics. Their reviews of sometimes obscure recitals can spell the difference between financial success and failure to a musician on a nationwide tour. His backers are heavily dependent on the New York critics for advance publicity.

The most important similarity between the two papers, though, is that they compete for the same limited audience, the segment of the population with high educations and high incomes.

• Lagging—Operating this way is expensive. It's particularly hard on the Tribune. Of New York's seven major newspapers, it has the smallest daily readership.

Audit Bureau of Circulation figures for the six months ended last Sept. 30 give it a daily circulation of 345,462, compared with the Times's 534,376. For

the big-prestige, multi-section, and potentially big-money-making Sunday edition, the Trib's 535,009 lags far behind the Times's 1,149,467. The city's most widely read paper, however, is the tabloid Daily News, with a weekday circulation of 2.1-million and a Sunday readership of 3.6-million.

Traditionally, many New York and suburban businessmen who had both Times and Tribune delivered every morning have taken the Times to work, left the Trib for their wives.

What has saved the Tribune is this: Because it goes in large part to higherincome readers, it is third highest in

total advertising linage in the city. · Not Enough-The smaller paper's strategy, with its smaller budget and staff, has been to play up its major weapons: bright writing, a group of popular columnists, and clear, readable make-up. To an increasing degree, however, these weapons were proving not powerful enough.

The question whether New York could really support two such newspapers was being answered more and more by a "No."

The Tribune, up to the time young Ogden Reid was named president last April, was drifting along. Its Sunday circulation was gradually falling off from the record 729,000 achieved in 1947.

While costs mounted sharply, the Trib's advertising revenues failed to keep up, putting the paper in an eco-nomic squeeze. Belt tightening dictated that as more reporters left or were re-





HY GARDNER is the Trib's gossip columnist.



FRANCIS PERKINS, one of the music staff.



CLEMENTINE PADDLE-FORD is food columnist.



JOHN CROSBY gives TV and radio a going-over.



MARGUERITE HIGGINS, world-roaming reporter.



JOSEPH KASELOW'S specialty is advertising news.

BY-LINES are a big source of Tribune strength, each with its quota of avid readers. Many of the paper's popular staffers are also syndicated nationally.

FEATURES are another way the Trib looks to boost circula-tion. Here Hy Gardner (glasses) and staff discuss the pocket-sized Sunday TV and Radio Magazine,

BUILDING BLOCKS

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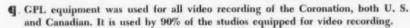
The producing companies of General Precision Equipment Corporation are engaged in the development, production and sale of advanced technological products. Each of these companies specializes in particular areas of advanced competence and possesses highly developed techniques and resources in its particular field or fields. These are the building blocks of GPE Coordinated Precision Technology, through which GPE serves more than a dozen important industries.

The chart at the left shows the areas in which each GPE Producing Company works. But it cannot show the high degree of specialization and the important position each GPE Company occupies in its field or fields.



Take **TELEVISION**, for instance, and the work of General Precision Laboratory Incorporated, the GPE leader in the field. GPL's research, development and manufacturing activi-

ties in TV are concerned with quality equipment for theatre, studio, business, industrial, institutional and military TV and do not relate to the home TV field. In all the areas in which GPL operates it has played an important part in the making of television history.



- The first appearance of a President on closed-circuit TV-President Eisenhower speaking from the White House to distinguished guests at the dedication of the Ford Research Center in Dearborn-was projected on GPL theatre equipment, producing fine quality pictures up to 65 feet wide.
- The same large-screen GPL equipment, and high quality, portable, intermediate size projection equipment newly developed by GPL, enabled guests assembled in several separate ballrooms of the Waldorf-Astoria to see and hear the Queen Mother at two New York dinners last Fall; made possible the historic 53-city TV hook-up which was a feature of GM's fifty-millionth car celebration. Both these types of GPL projection equipment also played key roles in the nationwide "heart-video-clinic"—the largest meeting of its kind ever held—attended by over 20,000 specialists in 35 cities. This GPL equipment is rapidly making closed-circuit TV a practical, everyday business and institutional meeting medium.
- ¶ New uses are developing steadily for <u>ii-TV</u>, GPL's highly efficient industrial and <u>institutional closed-circuit TV</u> system: to speed service, eliminate congestion, supervise and instruct; to control and speed train make-up and freight car loadings; to monitor and improve manufacturing processes; to view hazardous operations; for surveillance and security.
- Many broadcast studios, including New York network stations, are exclusively equipped with GPL cameras and control equipment.

GPL is a leader in military TV with its special and exacting requirements for airborne, shipboard and under-water uses and is also at work on color TV. A color film camera chain of high quality, for studio use, and additional color equipment are in production.

A broad description of the work of GPL and the other GPE Companies is contained in the GPE brochure, "Serving Industry Through Coordinated Precision Technology." For a copy, or other information, address:



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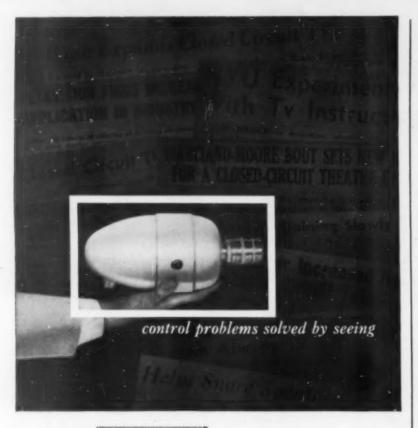


GPL TV Projector, with alternate optical systems; for audiences ranging from several hundred to thousands. Does not require skilled operator, Easily transported; set up in matter of minutes. Completely self-contained.



Remote Control TV Camera; for broadcast and industrial use. Pre-set control permits memory of 6 different shots. Mounted on servo-operated pedestal, provides complete remote central of lens selection, tris, pan and tilt, Highly useful for observing dangerous phenomena; permits broadcasting without use of camera man.

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# GPL *ii-TV* is in the news is it in your operation?

GPL ii-TV, the industrial and institutional television system of General Precision Laboratory, is an important new control tool for industry-so new that in many fields its applications are just being explored. Already it is evident that it has a multitude of uses in supervision, and in monitoring both processes and machines. No process is too dangerous or too remote, too confined or too dispersed, too monotonous or too fast, for the keen eye of the ii-TV camera. And ii-TV is proving equally valuable in industrial training and in presenting information to management, in large or small groups.

Behind ii-TV are the skill and experience which have made GPL a leading manufacturer of broadcast and military TV equipment. The camera operates unattended, needs minimum light. The entire system is of highest quality, is portable and compact, easy to maintain.

We suggest that you let us help you explore how this new control tool can be used to advantage in your own operations,

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tired they were not replaced. But this meant the paper had less and less to offer in competition with the Times.

· Enter Brownie-Young Brownie Reid was first put in a position where he could tackle this situation when he was named vice-president of the Tribune in January, 1954, at the age of 28. His mother-Mrs. Ogden Mills Reid-was chairman of the board and his elder brother, by 12 years-Whitelaw Reidwas president. At the time of his elevation the present publisher was in Paris running the Herald Tribune's European edition.

He came to New York that March with specific duties-to look after the business side, and make studies on how to improve the paper. These studies were incorporated in a two-year plan, now in operation and expanded well beyond the original time-scale.

Last April when his mother stepped down as chairman and elder brother Whitelaw took her place, Ogden was named president. The idea, according to sources close to the Tribune, was that each brother was to do the things he could do best-Whitey would run the news room and Brownie the business side. In just over a month, however, Brownie was running the whole show and Whitey was in California.

· Idea-The most important single tenet in the younger Reid's philosophy for rebuilding the Tribune is that it should concentrate on what newspapers can do best compared with television, movies, magazines, and so on-dig up and run news, especially news scoops.

The main point in his two-year plan, therefore, has been increasing news coverage. The program has also included strengthening the editorial page.
• Practice—Broken down, this has

· News space enlarged by 10 to 20 columns a day; new reporters and copyreaders in each department.

· The "saturation technique" for some big stories, with a sizable chunk of the staff assigned to various angles and allied stories. On the Salk vaccine announcement, the Trib used 20 reporters, half the front page, 18 storics inside.

· New bureaus in Moscow, the Middle East, South America; a new roving European correspondent.

· A weekday business and financial section nearly doubled in size (a major effort to make the Trib more of a man's paper-one he'll take downtown, leaving his wife a second copy).

· Longer editorials; and on the editorial and facing pages the political columnists, including the Alsops, Walter Lippman, and Roscoe Drummond, plus radio and TV critic John Crosby, and humorous European columnist Art Buchwald.

· A three-section instead of twosection paper-the third being an expanded sports and radio-TV section on light green paper. Page one of the second section gives front-page type headlines to local and suburban news.

 A pocket-size magazine on Sunday, containing radio and TV listings for the week. This step had to be taken last May, ahead of schedule, in an effort to halt a worse-than-seasonal drop in

Sunday circulation.

• Puzzle contests—with the aim of getting non-readers to sample the improved Tribune, Ogden Reid says. The first of these controversial contests, Tangle Towns, was also rushed into the paper, he says, to stem falling circulation. He will not comment on its success, but trade sources believe it boosted Tribune readership by 70,000, of which between 20% and 30% remained. A similar though less successful puzzle contest, using scrambled Bible names, began last September.
• Costs—The plan was carefully budge

Costs—The plan was carefully budgeted. With the help of a nickel increase in the price of the Sunday edition (to 25 cents), the expenses of altering the Tribune have been met out of current

earnings.

Approximately \$1.2-million of current earnings have been spent to "improve the product," Reid says. Additional money for press expansion and an increased staff was figured as capital

expenditure.

• Gains—The results: Daily circulation is now approximately 400,000 and the Sunday readership has climbed back up to 600,000. Unfortunately neither of these figures are "solid," the publisher admits. "We believe that we have built long-term growth into the Herald Tribune, however, and while we don't expect it to happen overnight, our goal is to have daily circulation solidly at 400,000 and Sunday at 700,000."

Advertising for the first 11 months this year totals 20,221,126-lines, a gain of 664,214 lines over the corresponding period in 1954. (In the same period, New York Times linage shot up to 45,510,974 lines—or 5,006,874 more than in the 11 months of 1954).

Young Reid is well aware that many of the Trib's readers are moving to the suburbs, and part of his plan envisions more suburban coverage. Collecting all suburban news on one page is only the first step. Another rumored move for the near future is a special business and financial Sunday section.

 Backstops—Fortunately the Tribune does not have to rely solely on its own circulation and advertising sales for in-

come.

Among other sources are:

 The European edition, printed in Paris—in the black with record circulation and advertising linage.

 The Hearld Tribune syndicate, with over 800 worldwide clients for The Credit Manager came up to the three standing there.



### The Executive V. P. takes control

"But this—" the Production Manager was almost plaintive "—would mean a complete retooling! We can't fill this order with the sctup we have!"

"Isn't that," the Sales Manager thought, "just like an engineer?" Aloud he said, "Bob, I'll leave that worry to you. We've got the order, and it's enough to use up our whole plant capacity!"

"More than use it up!" The Production Manager sounded bitter.

"Frankly, that's what has me worried." The Executive V. P. deliberately kept his voice level. No good stirring things up more than they were already. "If we accept this order, we've got to find more working capital—and I frankly don't know where!"

The Sales Manager was scornful now. "Here I expect opposition, not from you guys, but in Credit. Credit passes the account in a breeze! Harry says it's insured already, and he's putting in for more coverage, and—".

"—and he's practically got it already!" The Credit Manager came up to the three standing there. "I'm having lunch with our American Credit Insurance Agent," he went on, turning to the Executive V. P. "and I'd like to have you along. How about it?"

"Wonderful, Harry!" The Executive Vice President seized the straw and no longer felt that he was drowning in difficulties.

"—so you see, there's not much point in our increasing the coverage, since we can't take the order anyhow." The Executive Vice President felt he was letting the American Credit man down soft and easy.

The agent smiled to himself. "Well, Mr. Robinson—" he kept his voice judicially calm "—have you considered your accounts receivable as collateral for the working capital you need? You can, you know."

"Well, that's true, but we'd need a lot of money—and for a pretty long time, too!" The Executive Vice President was not exactly dubious, but . . .

"On insured accounts—and that would include your newest account, of course—you shouldn't have any difficulty at all in raising all the money you'd need." The American Credit Insurance man was very sure in his tone. "As far as the time goes, you can most likely arrange to use funds on a continuing basis. We've handled quite a few such arrangements, where the policy names the lending institution as the collateral beneficiary. Here's how it works—" and he went on to outline a plan.

The Executive Vice President was dubious no longer. He suddenly saw a way to give Production the tools it needed, to give Sales a go-ahead on the biggest account in company history, to give his company the biggest boost it ever had—and he felt once more in complete control of the situation.

Enhancing the value of accounts receivable as collateral is only one of the advantages of having Credit Insurance. Among the 12 major benefits of Credit Insurance, a number of others are also bound to accrue to your favor. For your copy of a booklet, "A Preface to Profits," write American Credit Insurance, Dept. 42, First National Bank Building, Baltimore 2, Md.

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news, features, columnists, and with clients and revenues both growing.

 This Week magazine, a Sunday supplement which the Trib and 34 other papers help support, and from which they receive increasing revenues.

• Morale and Management—One of the new president's thorniest problems has been morale in the newsroom. Several top reporters have left, among them Pulitzer prize-winning Homer Bigart, now on the Times.

Said one ex-Tribune staff man recently, "Some of us had the feeling the Tribune was sacrificing its high editorial standards for puzzles and other business office-inspired promotions. Also, a few of us who were becoming unhappy there anyway felt the big management change was a good time to leave." Reid is well aware of the morale problems, hopes they will disappear after the Tribune has been on a sounder footing for a while.

By "big management change," the ex-staffer wasn't referring only to Brownie replacing Whitey Reid. The city editor left to "take a better job," the managing editor was moved to Sunday editor, and a new executive vice-president put in charge of both news and buriness departments.

The new executive vice-president, Frank L. Taylor, came to the Trib last April from the Hearst-owned Milwaukee Sentinel, where he was publisher. Among his views on his new job: "The Herald Tribune is seeking the literate, alert reader who wants to get more news in less time. We're out to provide more than superficial news coverage, without getting ponderous about it."

• Brighter Times—What effect have these changes had on the Times? "None whatsoever," declares a spokesman for that solidly entrenched paper. "The Times sticks to its own knitting. We don't are anybody."

We don't ape anybody."

Nevertheless, while the Tribune has been working toward stronger competition on the Times's own ground of complete news coverage—the effort of the Times for brighter style and make-up has become more marked.

Actually, what changes there are in the Times have not been nearly so dramatic as those in the Tribune, and the effort goes back much further.

the effort goes back much further.

• How Solid?—Because the public doesn't get a look at Trib finances, it's impossible to tell how close to the brink the Tribune was when Brownie Reid took over. For the time being, at least, he has unquestionably stopped the drifting and headed the paper in a new direction, toward safe ground. In 1955 the answer to whether New York could support both Times and Tribune has been "yes." But it will take years before this answer is taken for granted—if, indeed, it ever is.



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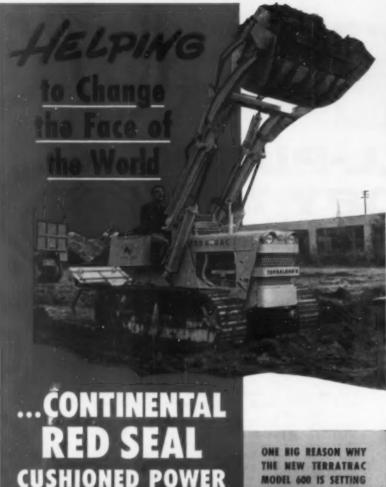
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#### BUSINESS ABROAD

### France

This weekend brings another entrant into the U.S. market for foreign cars. Sleek, "ahead of its time," and with an unmistakable Gallic elan, the new auto arrives from Paris to take up temporary residence at the Chicago auto show. Later the car will be sold nationally, as one of Europe's most conservative, eratic—yet brilliant—auto makers makes its first play for the American car market.

The car is the DS-19. (The French call it "le DS," which, in their mouths, sounds like "day-ess"—French for "Goddess.") This is the revolutionary product of Societe Anonyme Andre Citroen.

Though Citroen is not France's largest auto maker (the state-owned Renault is biggest, Simca produces more passenger cars), it does have top prestige among French car makers. Yet its reputation has been built upon only one auto design, more than two decades old.

• For Sales, and Enigma—Now that Citroen has made its change, it has come up with the most radical auto design at present in mass production. Still, it hardly seems the kind of car that will go strongly in the mass market that's stirring among Europeans. Nor, perhaps, is it the auto for the foreign car buff in the U.S. But the Citroen company, enigmatic and sometimes perverse, is staking a lot on the Goddess, and auto men everywhere are watching its progress carefully.

The new DS-19 is as flashy as its famed Citroen predecessor, the Onze, is sedate. It comes in bright colors, contrasting with the almost-always black Onze. Unlike the old car, it's comfortable. But like the old car, which shocked the auto world of 1934 with its front-wheel drive, the Goddess has the engineers talking.

• Master System—The big feature this time is what Citroen calls "hydropneumatics." This is a blanket application of hydraulic principles to steering, suspension, gearshift, and brakes. A master hydraulic pump drives off the engine (a 4-cylinder, 75-hp. job), and supplies hydraulic pressure to a central accumulator. This, in turn, feeds the various hydro-pneumatic units.

For example, the suspension system consists of a sphere and a piston placed beside each wheel. Inside the sphere is a flexible diaphragm. On one side of the diaphragm is an inert gas; on the other side, a hydraulic fluid. As the car moves along the road, the piston, connected to the wheel, receives the shock of bumps, pushes hydraulic fluid

# Backs a "Goddess" for U.S. Sales

into one side of the sphere, and the shock is taken up by the inert gas.

Citroen claims that this marriage of gas compression and hydraulic action provides split-second braking, steering and gear-shifting, and gives the Goddess

an ultra-smooth ride.

The idea of a central hydraulic system isn't new. Americans have talked of it for years, and the new General Motors gas turbine "dream car" has a somewhat similar system. On the other hand, a Detroit auto engineer wonders if Citroen hasn't carried the principle too far. This engineer wonders whether the Goddess will have enough hydraulic pressure to operate all the units under all conditions.

· Ahead of Detroit-The new braking system uses air-cooled disc brakes on the front-wheels. That's something U.S. engineers have been calling for. Though the car's power steering and clutch-less shift won't excite Americans, they are new to European stock cars.

Service is a problem. Few mechanics will know what to do with the DS' precision-tooled hydraulic parts. Citroen agrees, and has established the principle that if one of the key hydraulic units fails, it should be replaced. That's an easy job and can be done in two minutes, say Citroen people. Besides, they add, the system itself is liable to only the barest minimum of trouble.

All in all, the car looks and acts racy enough to appeal to those who want the appearance and the maneuverability of a sports car, plus the foamrubber comfort of a conventional car. It will sell in New York for \$3,285.

Citroen says it has booked orders for a year's production. This runs to about 63,000 units, out of a total 1955 French auto production of some 750,000. Many of the first comers have happily plunked down 7% of the purchase price (\$2,657

in France) as a deposit.

• Too Much Car?-Yet you hear doubts about the Goddess. The problem may be that the DS-19 is too much automobile for France and Europe. It's well out of the popular price class, and \$500 more than the Onze, which is beginning to slip competitively. And though Citroen is making a baby car (New York price: about \$1,000), it seems to be putting most of its effort behind the DS-19. Thus, Citroen may be bucking the trend toward lightweight, under-\$2,000 cars.

· Lagging and Leaping-But bucking a trend is no novelty to Citroen. As one Frenchman puts it, the company has the unique capacity of being 10 years



CITROEN'S DS-19 (above), shorn of the 21-year-old Citroen shape and packing revolutionary hydraulic control system, trundles into U.S. foreign car market this week.

BACK IN PARIS, old (right) and new Citroens pass one another at Citroen plant, where some 63,000 orders for the DS-19 are on the books. Company will push export sales.



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HEAD-DOWN in engine, Frenchman pores over DS-19's new suspension.

behind and 10 years ahead, simultaneously. Its history is one of curious tim-

Some believe Citroen's troubles have been inherent in its operating methods. To produce 154,000 cars last year, it operated 32 separate plants. It is pushing complete integration (even to its own sheet steel) to what some figure is an extreme.

In a business community known for secrecy, Citroen is nothing less than conspiratorial. The annual report says little or nothing. A research engineer who formerly worked at Citroen relates that he was not permitted to discuss his work with a fellow researcher who shared his office.

Public relations people at Citroen are well-nigh inaccessible. Citroen has had virtually no advertising since 1934.

• In the Millions—For all this, it is making money: Last year's profits were about \$2.5-million. But Citroen didn't start off that way.

Founder Andre Citroen became famous during World War I as a mass producer of shells. Soon after, he applied some of his principles to cars. He hit the startling (for 1919) figure of 3,000 units a year right off the bat. In 1921, he introduced a car for the carriage trade. It failed, and only fast retooling for a smaller model saved him. In 1924, after a visit with Henry Ford, he was the first in Europe to stamp out all-steel bodies. Later, he mechanized operations with the help of Budd Co.

Again in 1928 he brought out a car too expensive for the market. France, like the U. S., felt then that prosperity was here to stay. Citroen was France's leading auto maker, and French auto production was second only to the U. S. The depression hit hard and fast, but Citroen ignored it. At the bottom of the slump, in 1934,

he brought out the front-wheel-drive Onze. It didn't sell well, and it had bugs in it. Citroen went bankrupt that year, Michelin, the French tire combine, took control, and Andre died soon after.

• Change at the Top—Michelin put Jean-Pierre Boulanger in charge, as skillful a manager as Citroen was an engineer. He raised capital, set the Onze right, and has sold to date over 1-million—including a new luxury version that came out in 1938, and which the company will continue to make despite the arrival of the Goddess.

Boulanger also set Citroen to work on a small car, to sell for under \$500. Already competitors were producing such a car. But war closed down the project, and almost closed Citroen's Quai de Javel headquarters. Unlike Renault, Citroen had no truck with the Germans. After the war, it seemed that Citroen's virtue was rewarded-Renault was nationalized. But first appearances didn't prove right. Renault, being able to draw on public funds, retooled fast, moved quickly ahead of Citroen, and now produces a third of the French vehicle output, compared to Citroen's 25% or so. Simca, meanwhile, has acquired Ford of France, and Citroen is in a two-way competitive squeeze.

Not until 1953 was Citroen ready with its own baby car—a tiny, canvastopped job that seems the world's ugliest auto. With primitive body work, noisy engine, cramped space, the little "Deux Chevaux" is just getting going now. Surveys show that its owners (at least the top rung of France's low-paid industrial workers can afford it) like the car.

 Plugging U. S. Market—But all eyes are on the Goddess. Citroen aims to establish it as the true successor to the Onze. A big budget has been allotted for advertising. For the first time, Citroen is seriously moving into the U. S., with distributing subsidiaries in Los Angeles and New York. It's hoping that the Goddess will

It's hoping that the Goddess will appeal to Americans, and that even the little "Deux Chevaux" can snatch some of the second-car, go-to-the-station market away from Germany's

Volkswagen.

Citroen has distribution operations in Latin America, a big Citroen export market, and foreign manufacturing in London and Brussels. Export orders for the Goddess are said to be receiving priority, and Frenchmen are beginning to growl that the foreigners will get the car first.

Already, rumors have started about a new version of the DS-19. This time, they say that in two years the Goddess will sport a new, air-cooled, fuel injection engine. Characteristically, Citroen has no comment. END



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### Kaiser's Cars

Lush deal he made with Peron shows signs of festering under new regime, though changes may be slight.

Last week the government of Pres. Pedro Aramburu froze the Argentine assets of the Kaiser enterprises, along with those of many other local and foreign companies in Argentina (BW-Dec.31'55,p60). Aramburu told Edgar Kaiser that he was "deeply concerned" with the scope of the auto plant agreement the Kaisers had made with former Pres. Juan Peron.

It may be that, after a thorough study, the project will go ahead with no more than a few modifications. On the other hand, it's possible that Kaiser will find that, in supping with Argentina's departed dictator, it failed to use a long enough spoon.

· The Setup-Briefly, the deal went like this: The government's Industrias Aeronauticas y Mecanicas (IAME) signed an agreement with the Kaiser-Willys group to set up Industrias Kaiser Argentina, to produce, at Cordoba, some 40,000 vehicles yearly by 1959 (BW-Apr.30'55,p138). Kaiser's share was 31% represented largely by some \$8million worth of machinery Kaiser would bring in. With Argentina's desperate auto shortage, and thanks to special clauses in the contract, IKAand Kaiser-stood to make a whale of a lot of money. There were liberal for-eign exchange allowances, to pay for IKA's imported equipment, and profits for the Kaisers.

To date, Kaiser has shipped 94 American families to Argentina, some 4,300 tons of machinery and equipment, worth over \$7-million. Sales outlets are being set up, contracts let for parts. At Cordoba, the engine plant is 70% finished, the body plant 40%. And just over 1,000 Kaiser sedans, assembled from parts gathering dust in the U.S., have been shipped to Argentina. From Kaiser's-and Peron's-point of view, they were an important part of the deal.

 Conditions Changed—Peron fell from power Sept. 16, and two successive new governments have set about housecleaning the Argentina economy. No favoritism on imports, no special deals, tough exchange and trade restrictions are the order of the day. And IKA is caught in the middle.

Not only does IKA lose preferential exchange rates, but a heavy surcharge has been tacked on to most of the imports IKA needs. The increase in cost to the company is tremendous. Supplies and raw materials needed for the

plant itself are vanishing; subcontractors can't keep pace with their commitments. The plant was supposed to open in March—it's doubtful now whether it will be in business before late summer

at the earliest.

· Costly Sedans-Not the least of IKA's troubles is that it may be stuck with two-thirds or more of the fully assembled, imported sedans. They were imported from the U.S., and IKA's agreement with the Peron regime guaranteed a fat profit on their landed cost in Argentina (the government would see that they were sold to deserving military men, who in turn could re-sell them at fantastic prices for another handsome profit, and thus, presumably, remain loyal to Peronism). Now with the stiff surcharge thrown onto auto imports, and 650 cars unsold, IKA doesn't know how it can sell them at a profit.

The government has told IKA to go ahead as best it can with the plant and has O.K.'d a 200-million peso loan to IKA, promised in the original contract. That, according to IKA, is a hopeful

sign.

#### BUSINESS ABROAD BRIEFS

The Gulbenkian Foundation, now being set up, could be one of the largest. Calouste Gulbenkian, who died last July at 86, was one of the richest men on earth. He owned 5% of the Iraq Petroleum Co., and income from IPC will be the largest part of the fund's estimated \$15-million yearly. Nubar, his son, is being advised by London lawyers; the Rockefeller Foundation's Dean Rusk was called in. There are delays, legal and otherwise, on the final form of the fund.

New Zealand wants to join the International Monetary Fund and World Bank—after a 10-year holdout because of its Socialist government's opposition to fixed exchange rates. So far, the Dominion has been able to raise development money on the London market. Now London money is tight, and New Zealand wants to come to the World Bank.

Free world steel output, reports Iron Age, jumped 22.5% during 1955, while the Communist bloc increased production only 10.5%. The score: 233-million tons against 68-million.

"Cement war" is expected in Canada, says Toronto's Financial Post. A \$90-million expansion, involving seven companies and as much as a 47% increase in Canadian capacity, is in progress. Imports (more than 9-million bags last year) will be first to feel the competition from all the new capacity.

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### Concessions Must Be Two-Way

Some plain talk on U.S. foreign trade policy was delivered by our Ambassador to France, C. Douglas Dillon, in an address before the American Chamber of Commerce in Paris. Deliberately forgetting diplomatic niceties, Dillon made clear his belief that those who criticize the Eisenhower Administration for being protectionist are well off base.

The record on tariffs does not justify such criticism, according to Dillon. He pointed out that the average duty on all our imports is less than 6%, which "clearly ranks the U.S. among the low-tariff countries in the world today."

This is due to a steady reduction in tariffs over the last 21 years. Between 1933 and 1954, our rates of duty were reduced by 75% on over 20% of our imports and by more than 50% on the remainder of our purchases from abroad.

Few other countries can show such progress. And it is being continued, for Congress, at the President's request, has authorized another 15% reduction of U.S. tariff rates over the next three years.

Moreover, despite all the furious talk about the escape clause, Dillon noted that it had been invoked by the President on only six occasions. And in no case, have the consequences been so black as they were painted.

For example, the most celebrated instance was the restoration of the watch tariff to protect the domestic watch industry. This was supposed to spell ruin for the Swiss. Yet in the first six months of 1955, Switzerland exported 4.4-million watches and watch movements to the U.S., compared with 4.3-million in the first half of 1954, before the tariff adjustment.

There are other measures of progress in our trade policy. In 1953 and 1954, Congress passed legislation to simplify customs procedures. And in 1955, Pres. Eisenhower, by executive act, eliminated the need for consular invoices on imports. In addition, the lending authority of the Export-Import Bank was increased by \$500-million, and the U.S. has joined in establishing the International Finance Corp., which will increase trade and investment.

Dillon did not deny that more could be done—and he himself underlined the need for further progress. But he also emphasized that "our efforts to reduce trade barriers" must be "effectively matched by our trading partners." He said the U.S. must receive "roughly commensurate concessions" from our allies if progress is to be maintained. The scheduled 15% reduction in our tariffs is dependent on similar concessions abroad.

Concessions must not only apply to tariff reductions. It is relatively simple to reduce tariffs to the bone and then nullify the action by erecting import controls and special taxes. This, Dillon warned, jeopardizes all the progress made to date.

We think that Dillon is right. Liberal trade is based

on liberalism on both sides. Those who criticize the U.S. for retreating from a liberal trade policy can find little support in the record. And those who want the U.S. to make new concessions must show a willingness to make concessions of their own.

### Unions' Wealth

Labor unions have traditionally kept their financial dealings a closely guarded secret. This practice has given rise to haphazard guesses as to their actual wealth. Shibboleths like "rich, powerful unions" have, in the main, stemmed from estimates of union bankrolls made by outsiders.

Some of the mist surrounding union finances has been evaporated by a comprehensive study just released by the National Industrial Conference Board (page 44).

If annual income is any criterion, NICB confirms the hunch that organized labor as a group is, indeed, wealthy. If each of the 194 unions collects only the constitutionally prescribed minimum membership dues, the annual total is about \$457-million. Of this, slightly more than half is retained by local unions; the remainder goes to international unions in per capita taxes. Add annual receipts from initiation fees and other sources to the dues figure, and you find a yearly revenue figure of well over \$500-million. Of course, this wealth is not evenly distributed. Over \$250-million goes to only 85 unions. Less than \$250-million is split up among the remaining 109.

NICB's study casts light—but it also sharply defines shadows. For example, we would like to know how much of this mammoth income goes into capital reserves. Each year the Teamsters union collects at least \$46-million in dues. But the amount of money in Teamster coffers is a mystery. It is unlikely, though, that the Treasury was seriously dented by the \$5-million building the union recently erected.

We would also like to know something possibly more significant. How do unions invest their money? Many unions have sizable reserves to invest—and union pension and welfare funds are steadily increasing in size.

What we do know of how unions employ their funds is of little help in learning what general investment practices are. One union gives money to Israel for hospitals; others buy corporate stocks with welfare funds. George Meany, AFL-CIO president, urges building trade unions in New York City to use welfare and pension funds to help the city build more middle-income housing.

So long as labor leaders follow their traditional, secretive paths, it will be a long time before we have comprehensive information on union reserves or investment practices. An attitude and an aptitude for solving bearing problems . . .



FAFNIR PILLOW BLOCK equipped with Wide inner Ring Mechani-Seal Bail Bearing and self-locking collar,

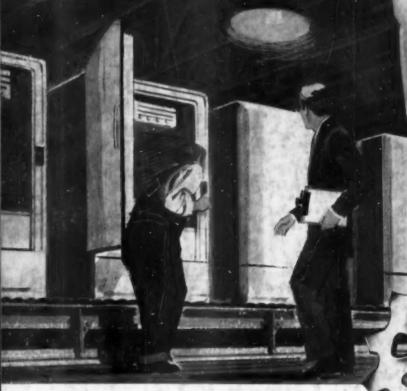
Oil spoilage losses cease to be a problem for textile mills when plain bearings are replaced with Fafnir Ball Bearings equipped with frictionless Mechani-Seals. These grease-lubricated units are sealed against leakage and the entrance of contaminants. What's more . . . as a result of their Mechani-Seals, once-a-shift lubrication is cut to once every six months or much longer; costs of keeping machinery, fabrics and floors clean are slashed.

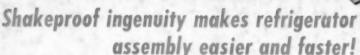
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